NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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THE GARDEN.

"First SPRING came tripping on from southern bowers,
And strewed her sunny paths with fragrant flowers
Bade the still brook from out its torpor wake,
And freed from icy bonds the captive lake;
Then, smiling back upon the smiling land,
Resigns the rule to SUMMER'S warmer hand."—*Anon.*

MAY, in olden times, was regarded as the boundary, or demarcating line, separating the frontiers of the antithetical seasons of Winter and Summer. April, with its strange caprices and fluctuations of storm and sunshine, lights and shadows, has passed, and been succeeded by that period in the cycle of the vegetative months, which, if we credit the language of poesy, and, may we not likewise add, of our own experience, past as well as present, is always so replete with pleasure, both to the old and young.

To how many who have now passed

"Into the sere and yellow leaf,"

was MAY DAY, to adopt the expressive language of the author of "Acteon and Diana,"

"The choice time of the year."

And to how few, indeed, when we recal the past, does the beautiful and impassioned eulogy upon May-Day customs in Pasquil's "Palinodia," appear extravagant or exaggerated?

"Happy the age, and harmless were the days,
(For then true love and amity was found,)
When every village did a May-pole raise,
And whitsun ales and May-games did abound:
And all the lusty younkers in a route,
With merry lasses danc'd the rod about;
Then friendship to their banquets bid the guests,
And poor men paid the better for their feasts."

For us, we confess, there lingers something of pleasing interest in the remnants of those rural and social pastimes in which our forefathers were wont to engage, and we linger over them with a feeling of pleased delight.

Early in this month, THE GARDEN will demand attention. As an *art*, gardening may be contemplated as the surest indication—the most unerring exponent—of civilization. But let it be borne in mind that in speaking thus of gardening, we do not mean, simply, the cultivation of esculent vegetables; for although this should always form a prominent consideration, yet there are other matters of importance to be attended to. We hold that, in all things, it is ever advisable to mingle the *utile* with the *dulci*,—the useful with the agreeable. There should be something of the agreeable and ornamental even in the kitchen garden, which should be laid out with the triple object of convenience, profit and beauty.

The beds, borders and walks should be so arranged and laid out, as not only not to offend good taste, but should be so constructed with regard to each other, as to present to the senses the luxury of a complete and perfect whole—a system in which all the parts and appendages accurately harmonize, and contribute, each in its due degree, to the achievement of the several ends designed. When so managed, the garden dispenses a greater degree of comfort to its possessor than any other portion of the farm. But this can only be the result when it is cultivated with a view to the achievement of high and noble purposes, and an inflexible determination to overcome every obstacle to success.

The Japenese, in their gardening, display the most astonishing art. Maylow, in his work on Japan, published at Amsterdam in 1830, asserts that the Dutch agent of Commerce, at Nagœni, was offered a snuff box one inch in thickness by three in height, in which grew a fig tree, a bamboo and a

plum tree in bloom. Some of their gardens resemble pictures in which nature is skilfully modelled in miniature; but it is living, natural. In their common practice, the plum tree, which is a universal favorite, and the recipient, consequently, of their most constant and skilful attention, is so trained and cultivated, that the blossoms are as large as those of the dahlia! Facts like these go to demonstrate the almost illimitable, though as yet hardly dreamed of, capabilities of the art. When these shall have been more fully developed and appreciated, and the influence of strictly "utilitarian" views have succeeded in a measure to those of a more liberal and enlightened character,—and when—which is of still more importance, perhaps—we shall have learned to recognize the intimate connection which is traceable between the relationship of mind and matter, or, in other words, the salutary influences which nature, through the vegetable kingdom, exerts over morals when rightly viewed, the exaltation of the art to a condition that shall be regarded as an approximation, at least, to its legitimate and proper dignity, may be contemplated as by no means either dubious or remote.

It is in the garden that some of the most valuable experiments that have contributed to shed light upon the labors of the husbandman, during the last half-century, have been made; and it is there also the ethics has wisely resorted for living illustrations of its most important and impressive truths. The moral influence exerted over the mind and character of the young, by a well-arranged and carefully conducted garden, is certainly a consideration of no insignificant moment. "Flowers are living teachers;" and when we become capable of comprehending their language, and of garnering up the wisdom that emanates in ceaseless, odorous outpourings from their eloquent petals,—the "mysterious mechanism of their being,"—we shall discover the accuracy of the apothegm so curtly, and with so much rhythmical beauty, advanced by the bard of Avon, and find

> ——"Books in the running brooks,
> Sermons in stones and good in everything."

For the New England Farmer.

FAST HORSES.

I scarcely take up a paper that has not some allusion to this topic; and what is most singular, I find no one that boldly encourages their introduction. The truth is, fast horses, like fast young men, are not worth rearing, their exploits dazzle for the moment, and then vanish away. I speak of the term *fast*, in the technical sense in which it is used, and not in that more substantial sense, indicative of superior power and ability. No one will despise an animal because it can accomplish extraordinary feats, but an animal should be valued for this ability alone. Among other writers, there is no one that I have met who has treated this topic with more delicacy and propriety than Wilson Flagg, of Beverly, a writer, of whom it may in truth be said, "whatever he touches he adorns." I commend his essays to the notice of the public; confidently believing the more extensively they are read and considered, the more thoroughly will the public taste be improved and corrected.

I am by no means disposed to charge all admirers of fast horses with being blacklegs and gamblers, but I do think that the natural consequence of trials of speed, is the encouragement of these vices; and wherever these prevail, *intemperance* will be intermingled; and when "wine is in, wit will be out," as all experience testifies.

March 20, 1857.

For the New England Farmer.

"WHO SHALL DECIDE, WHEN DOCTORS DISAGREE."

In the account given of the discussions at the agricultural meetings on Tuesday evenings, called Legislative Farmers' meetings, at the first of which His Excellency the Governor kindly presided, he is said to have spoken in terms of praise of the agricultural literature of the commonwealth. At the expression of such an opinion, by a gentleman of his intelligence and shrewdness, we were not surprised, as it accorded well with our own notions; for we say without hesitation, that the agricultural literature of this commonwealth will compare well with that of any other State of the Union, so far as our opportunity for observation has extended. But, imagine our surprise, when at the voluntary meeting of farmers on Thursday last, a young sprout from Middlesex presumed to say that we have no agricultural literature at all, that the papers which pass under this denomination were extremely ordinary, and as to the State annual volume, it was, at best, but a compound of what had been said, and returned by the several county societies. Who this sprout was, we are glad not to know, and whether his beard has or has not yet grown, our sight did not enable us to determine; but we will say to him there were those within the sound of his voice, when speaking, who have forgotten more than he ever knew, or ever will know, unless he displays more wisdom in the acquisition, than he did in his speech on this occasion. He should remember the adage, "young folks think old folks fools," &c. I, Sir, think the *New England Farmer* a sound, sensible paper. I have received it every week since it was first published by Thomas G. Fessenden, a man who possessed as keen perception and wit, as ever the young gentleman himself supposed to be his own portion,—and this is enough for any moderate sized man,—and have derived from it as much useful instruction as from any other paper I have ever read. As to the *Cultivator*, I consider the views of its editor the best possible authority in all matters relating to stock of every class. As to the *Ploughman*, I know it is a favorite paper with many a sensible farmer, and although I do not always entirely harmonize with the senior editor's notions, I have always found the junior editor's deportment to be that of an intelligent gentleman. I have found many things in his paper worthy of commendation. On the whole, sir, I think it best for boys, as well as others, "to think twice before they speak once."

Feb. 7th, 1857. ONE OF THE OLD SCHOOL.

THE WORLD IS FULL OF BEAUTY.

There is beauty in the forest
Where the trees are green and fair;
There is beauty in the meadow
Where wild flowers scent the air;
There is beauty in the sunlight,
And the soft, blue beam above;
O! the world is full of beauty
When the heart is full of love!

There is beauty in the fountain,
Singing gaily at its play,
While rainbow hues are glittering
On its silvery shining spray;
There is beauty in the streamlet,
Murmuring softly through the grove,
O! the world is full of beauty
When the heart is full of love!

There is beauty in the moonlight
When it falls upon the sea,
While the blue, foam-crested billows
Dance and frolic joyously;
There's beauty in the lightning gleams
That o'er the dark waves rove;
O! the world is full of beauty
When the heart is full of love!

There is beauty in the brightness
Beaming from a loving eye;
In the warm blush of affection,
In the tear of sympathy!
In the sweet, low voice whose accents
The spirit's gladness prove!
O! the world is full of beauty
When the heart is full of love!

For the New England Farmer.

BEE HIVES.

To prevent that which I have to say from being considered all theory, I beg leave to say that I have been engaged in bee culture 28 years, and have probably extended my operations in the business farther than any other person in this country. I have not been altogether an idle observer, or failed to notice some portion of the nature and instinct belonging to the bee; and claim a large share of practical experience. The instinct of the bee, can be improved but little. Unlike most domestic animals, she is perfectly independent of the fostering care of man; she can and does leave him for a home in the woods with the most provoking indifference, and will there provide herself with all she needs.

Whenever there is a yield of honey, her nature prompts her to collect it. As long as her storehouse contains room for its deposit, her toil is assiduous to fill it up; whether it is the painted palace, the thatched hovel, the hollow tree, or the cavity in the rock. That she will go forth with greater alacrity, obtain her load of sweets and return in less time, or that she will carry a greater burden, or bring home more loads in a day, merely because she lives in a painted hive instead of a hollow tree requires considerable sophistry to maintain. If patent venders would present the merits of their hives as offering superior facilities for operations, instead of fabulous quantities of honey stored, they would be entitled to a greater share of our confidence. Mr. Langstroth's moveable comb hive combines many advantages, which promise a remuneration for expenses, aside from the immediate production of honey. But I hope that no one will contend that they will collect more honey in a given time, just because they have that hive in which to store it. It will be admitted that a good swarm, located early, having convenient access to honey-yielding flowers, will in ordinary seasons store from sixty to one hundred pounds of honey in a barrel, box, house or tree. Thirty pounds of this is probably sufficient for any family of bees through the winter. It is plain, therefore, that if by any contrivance these stores can be divided, leaving the amount necessary for the bees—that the surplus may be taken from them for the use of their owner.

When bees are put in a very large hive, such a colony will be likely to last much longer than if put in a very small one, and will probably send out a less number of swarms, and store a less quantity in the supers. If put in very small hives, they will store a large quantity in the supers, particularly the first season, but will have too little room for the necessary brood combs to keep the colony supplied with recruits, and be very liable to have insufficient stores. Hence it is important to avoid the two extremes. Experience proves that the apartment for brood combs and winter stores should be combined—any division making it necessary for the bees to leave one apartment for another, to obtain stores in winter, is often attended with fatal results. Let the main hive then be of the proper size, which experience will soon indicate; and all that the bees can do besides filling such a hive, may be stored in the supers as profit,—on this point is centred all interest in modern bee culture. Additional hives or boxes to receive the surplus, are usually placed on the top, through which several holes are made for communication. The bees will work through the top more readily than at the side.

If this surplus is to be consumed at home, a wooden box is all sufficient and somewhat cheaper, while the honey may be obtained in equal purity. But for market, the honey is so much more tempting, when seen through the glass sides and ends of the boxes, that a greater price is readily paid for the honey, with the boxes at the same rate. The more a hive can be simplified and answer these ends, the better, and *any* hive that will do this, whether patent or otherwise, may be depended upon for success, as far as the hive is concerned. I have found the common box hive to answer admirably for obtaining surplus in every form that fancy may dictate. Myself and a few neighbors the past season have produced in glass boxes over twenty thousand pounds, without the aid of a single patent! The simple part of that amount being produced from flowers alone, has excited much curiosity for a full description of hives and boxes. Notwithstanding I have already described them in some of the agricultural journals, I will, with your permission, Mr. Editor, detail for your readers the method of construction &c., hereafter.

M. QUINBY,
Author of "Mysteries of Bee-keeping Explained."

St. Johnsville, N. Y., March, 1857.

REMARKS.—We are happy to spread the papers of so distinguished a Bee-culturist as Mr. QUINBY before our readers.

FLORA TEMPLE.—From some source unknown to us, we have received a graphic and most life-like portrait of Flora Temple, who made her mile in 2.24½, in harness, on the Long Island Union course in Sept., 1856.

A NEW WORK ON INSECTS.

We are much pleased with Dr. Asa Fitch's first and second report on the "Noxious Insects of the State of New York." The particular object of the Secretary's Reports will be best understood by a reference to the author's preface. We are here informed "that the insects infesting our fruit trees are to be first considered. Commencing with those which affect the root, the trunk, the twigs, the leaves, the flowers and the fruit. In the same order, insects which occur upon the pear, the peach, the plum, and the cherry, are successively taken up." From our fruit trees, our author passes to "noxious insects infesting our forest trees, field crops, and garden vegetables." We like the arrangement of the Secretary's reports upon insects injurious to vegetation, it being easily understood by the general reader, and, at the same time, sufficiently scientific. With an insect in your hand, by the specific descriptions to be found in the work, you can soon ascertain its name. The dimensions of the several insects, larva, &c., are given in inches and fractional parts of inches. We are of the opinion, however, that the size of insects can be better given by lines. The work is furnished with many figures of insects in their several periods of transformation, which adds greatly to its value. The Secretary's report, when finished, will doubtless be very valuable to farmers and horticulturists, and highly creditable to the author; and with such aids to our knowledge of economic entomology as we have received from the late Dr. Harris, Dr. Fitch, Baron Kollar, and several English writers, we may reasonably hope for the future, to be able more successfully to combat the hosts of noxious insects that surround us. The Hon. B. P. JOHNSON, Secretary of the New York Agricultural Society, will please accept our thanks for an early copy of this work.

NEW IMPROVEMENT IN WELLS.

An important improvement upon the usual method of obtaining water for irrigation and domestic purposes, has recently been introduced into the city of Stockton, by means of which a constant and inexhaustible supply of pure water may be obtained at very trifling expense. It consists, simply, in the sinking of a shaft by means of a two-inch augur, attached to light bars of iron, with other apparatus for pumping, drilling, etc., similar to that employed in boring the artesian well upon the public square. It requires but the labor of a few hours, with this apparatus, to reach a depth of fifty feet, whence can be obtained a supply of water that cannot be exhausted by constant pumping. There are seven of these wells in that city in successful operation, one of which is in the garden of Dr. Holden, and reaches a depth of thirty feet. It affords an abundance of soft, clear water, such as is not usually obtained from the shallow wells from which the greater part of the water used in this city is obtained. This new mode of procuring water, by simple means and at trifling expense, was first brought into public notice in Stockton by Mr. Jesse A. Austin, who has constructed all wells of this kind now in operation. They are, no doubt, destined to become universally adopted as the cheapest and the most certain means of obtaining water at all seasons. We have examined a number of these wells, and from the evidence we have of their capacity, and the quality of the water they furnish, we believe they can be made of greater value to the farmer than the artesian wells, with the uncertainty of obtaining water, which must ever render them unavailable in the San Joaquin valley.

Mr. Austin first constructed one of these wells on his own place; from the success of which, he was induced to experiment upon them in various parts of the city, and in every instance has succeeded in obtaining water in sufficient quantity for all the purposes of irrigation.—*California Farmer.*

For the New England Farmer.

DAIRY PROFITS.

MR. EDITOR:—In a late number of the *Farmer*, your correspondent, "Worcester," shows the cost of raising milk near the city, and proves that it can be made to pay a small profit at least. Thinking a few items in regard to making butter would be interesting to those who live so far from market as to prevent sending in their milk, I send you a few facts. My father keeps a small dairy, of from ten to twelve cows, and like many other farmers, keeps but little account of his profits or expenses.

Now I am one that likes to see things come round square, or, in other words, I like to see what stock or crops pay, and have for the last two years kept an account of income, losses, &c. Most farmers say that they should never dare to keep account of their farm expenses and profits for fear that they should see that they were running down stream, instead of improving their fortunes, or that they should see how foolishly some of their funds had been expended. I have had no experience in farming for myself, but it seems to me if I was going down hill I should want to have my eyes open in order to know when I got there. But they go upon the principle that "the blind horse travels best."

But I was about to give you a few facts in raising butter in the northern part of Vermont, for the Boston market. The cost of keeping cows is much less here than near the city. Good English hay is worth $8 per ton; oats 33 cts. per bu.; corn $1, and other things in proportion.

INCOME FOR 1856 OF TWELVE COWS.

1670 lbs. butter, at 24 cts. per lb	$400,80
270 " 18 "	48,60
225 " used in the family, at 24 cts. per lb	54,00
12 calves	40,00
150 lbs. cheese, at 11 cts. per lb	16,50
300 lbs. pork, at 8½ cts. per lb	25,50
Total	$585,40
Income from each cow	$48,78

COST OF KEEPING.

24 tons of hay, at $8 per ton	$192,00
Pasturing, at $5 per cow	60,00
4 bushels of meal apiece in the spring, at 50 cts. per bu.	24,00
Interest per cow, $2	24,00
Total	$300,00
Cost per cow	$25,00
Profit from each cow	$23,78

One of the cows was dried up and fatted in October, and there were also two heifers in the dairy. I presume many of your readers could show much larger figures, though I think the average would fall somewhat below it. As far as my observations extend, the larger the dairy, the smaller the profit per cow, though with the same care and feed, other things being equal, I believe there would be no difference. I have come to the conclusion that farming is a pleasant, independent and profitable business if rightly pursued, and that we need agricultural schools where we can learn to analyze soils in order to know what elements are wanting to insure good crops. I have often thought that if the farmer could analyze his soil he would possess the key to unlock the door of sure success. I have for one determined to be a farmer. MAPLE.

March 4, 1857.

REMARKS.—Our correspondent's favors are very acceptable; these matter-of-fact things are what all farmers need. Thank you, sir.

For the New England Farmer.

PLANTING PEAR SEEDS.

MR. BROWN:—I noticed in your valuable journal some remarks on planting apple seeds. I will give you a fact in relation to planting pear or apple seeds. I have for several years taken seeds from the pulp, when the fruit is eaten, and dried free from the core, and put in a dry room. I usually select seeds from fruit that was taken from trees that were free growers, such as the Beurre Bosc, Diel, and others that make strong wood. Also in apples, Baldwin, English Sweet, Swarr, Gravenstien, and Codlin, or any great growers. I plant in the fall or spring, in the same way that I would flower seeds, in a row about two inches deep, taking care to have the soil rich and well pulverized, and rolled with a hand roller, or made smooth with a hoe. When the seeds are up, before they put out any leaves, excepting a seed leaf, I take them up and plant them out in a row about six inches apart, in good rich soil, not too dry or wet, and keep them free from weeds, during the summer; they will grow from four to six inches the first season. In the fall I take them all from the ground, and put them down in some safe place, and cover them with earth, and over that a board or leaves, so as to protect them from harm. The next spring, I prepare a plat of ground, suitable for a nursery, and plant them out about fifteen inches apart, and treat them as we should a well-conducted nursery, and in about four years my trees will be fit to put out in an orchard, and many of them will fruit in two or three years, or they may be grafted if it is desired. Yours most truly, E. A. SHURTLEFF.

Brookline, March, 1857.

THE EARWIG.—Many a housewife who has often felt her ears "crawl" on seeing "Forty-legs" hurry off, as she has taken up her mop, or some other household utensil, from a moist place, will be glad to be assured that this insect is not the earwig at all; and if it were, that it would not enter her ear if it could, and could not if it would; and even if it did actually get into the ear, it could exist there but a very short time, for it has been demonstrated by a correspondent of the *Homestead* that a decoction of veritable earwax is more immediately fatal to this insect than a bath in pure alcohol.

For the New England Farmer.

WOMAN ON THE FARM.

MESSRS. EDITORS:—Having a high esteem for your valuable paper, I have been pleased to see several contributions in it, recently, from *ladies*. It will not be denied, I presume, that the "ladies" exert not a little influence in the world, by *words*, as well as *actions*; and perhaps nowhere have they used their influence more to bless or to blight, to encourage or discourage, to help or to hinder, than in agriculture.

That sickly sentimentality, so often a characteristic trait of some *would-be ladies*, causing them to speak so disparagingly of farmers and their wives, of farmers' sons and daughters, has driven many a young man from the old homestead, to seek a fortune where it is not to be found. Thus may womans influence be exerted to blight, to mar, to deface the beauty of that employment to which her own attention should oftener be turned, and where she may, by her own efforts, help to "make the wilderness blossom as the rose."

The early institution of marriage is often quoted; let it also be remembered, that the *place* was a *garden* where it was instituted. It was *there* that she was appointed to be his "help-meet," while assisting him to "keep the garden, and to dress it."

Essential as is *good husbandry* to the success of the farmer, *good wifery* is not less. To cultivate the beautiful is woman's peculiar province; and where can she better display her taste than in training the roses to the trellis, and arranging flowers of every tint and hue in such contrast, as to best please the observer? Yes, it is her highest prerogative *to please*; and where can she find an ampler field for her ambition, than the farm and rural occupations afford?

Is she young, and desirous of personal attractions? Whose cheeks can vie with the farmer's daughters for their rosy tints? whose complexion so fair as her's who bathes in the early morning dew? Who, so happy and light-hearted as she who witnesses the morning dawn ushered in with songs of sweetest symphony? What wife so cheerful and happy as she, who offers to her husband, when he returns from toil, some luxury, the product of the farm, prepared by her own hands?

I know that we are called rustics, to whom "the lines have fallen in pleasant places;" and that our goodly heritage is thought by many to be semi-barbarous at least; but if the country is unsightly and destitute of beauty to some and the dwellers on the soil partake of its deformity, not so its flowers and fruits.

Where shall we find flowers in their beauty, fruits in their perfection, birds singing their merry songs of freedom, if not in the country? Our *ice-creams*, too, are no city invention, for where but in the country will you find the ingredients, in their freshness, their sweetness, and their richness?

It was not my intention in this article to draw comparisons unfavorable to the city; its elegance I would not affect to despise. But I do love the country; I love the farm, I love the motley groups of

the farm-yard; the noisy cackle of the hen, and the infant-like bleat of the little lamb, are pleasant sounds in the ears of the farmer's child.

Yes, I would be a farmer's daughter, and a farmer's wife; and were I dependent upon my own exertions, to "bring up" or educate a family of children, I would sooner hire a farm, and with their assistance till it with my own hands, than struggle for subsistence by that life-destroying instrument, *the needle*; but only so, when used to such extent as is often the case, to *support* that life it too often *destroys*. L. E. L.

Bradford, March 4th, 1857.

For the New England Farmer.

LETTER FROM MR. FRENCH.

Inauguration Ceremonies—the Rising and the Setting Sun—Arrest of a House Robber—Appropriations for Agriculture.

Washington, D. C., March 5, 1857.

MY DEAR BROWN:—The fourth of March has come and gone. Franklin Pierce has stepped quietly from the pedestal, and James Buchanan as quietly has ascended it. I say quietly, because the ceremonies which attend a change of the chief magistrate in our own country are as unlike the revolutionary movements which usually attend the downfalls and the ascensions of kings, as the rising of the sun is to a volcano. The morning was like a bright May morning in New England. The city was early crowded with people, of all ranks and colors. At eleven o'clock, a procession formed near the presidential mansion, to escort the president and president elect to the capitol. The military made the most conspicuous part of the show. About twenty-five companies, comprising nearly two thousand troops in all, with gay uniforms, silken banners, and bands of music, composed the military escort. The flying artillery, with their six brass field pieces, with their hundred and twenty men, and with the associations of their terrible prowess in the Mexican war, attracted much attention. Fire companies and political associations, a full-rigged miniature ship of war, drawn by horses, a flag staff seventy feet high, bearing a banner thirty feet in length, rigged to a wagon, aided in giving attractions to the scene.

At the National Hotel the president elect, with the vice president, joined the procession, the old and the new presidents riding peacefully together in the same carriage, and the procession then moved on to the capitol. At the north gate, the two presidents with their friends descended from their carriages, and proceeded to the Senate chamber, and thence to the east front of the capitol. Here an extensive *platform* had been erected, not of perishable political professions, but of timber and plank, broad enough to hold some fifteen thousand persons. This was densely packed with men and women, who, with probably some ten thousand more persons standing on the grass, were anxiously awaiting the appearance of the new president, as he was escorted through the door of the capitol.

A brilliant throng of gaily dressed ladies, of gold laced foreign ministers, and of members of Congress, at once crowded the enclosed area over the main entrance. Amid the gay crowd, without difficulty, we discerned the venerable head and the portly form of the new president, dressed in a plain suit of black, like any private gentleman. When the shouts which greeted his appearance had subsided, the president elect, standing at the front of the portico, read to the listening crowd his inaugural address.

Perhaps a score of persons may have heard his voice, but the thousands were compelled to be satisfied with their own imaginings, and their own reflections. And surely, there was a grandeur in the scene sufficient to excite the attention of all present, who were capable of appreciating its full import. At this hour, thus peacefully, with no voice to question its right or its power, the will of the people, expressed in conflict, in excitement, over a vast continent, for months, now, in the presence of the assenting nation, transfers to him who is the constitutional choice of the majority, the highest honors of the republic.

At the close of the inaugural address, the oath of office was administered by the venerable Chief Justice of the United States, and James Buchanan from that moment was president. President Pierce, with the nice appreciation of what is becoming in manners, which has always distinguished him, was among the first to take his successor by the hand, and as the roar of the cannons announced the accession of the new administration, one could hardly realize that all the parties of the country had not united in calling it into power. The procession soon reformed, and escorted the president and ex-president to the White House, where the former was left by the latter at the door, in full possession of the honors and the cares which wait on greatness.

The city, after the ceremonies, presented a scene in the principal avenue not especially flattering to republican morals. The whole population of the neighboring counties seemed to be in more than one sense, *loose* in the streets. Such an assemblage of drunken men probably cannot be found here, oftener than once in four years. Pickpockets and robbers are said to have been abundantly supplied from abroad, and to have operated with unusual success.

A single instance which occurred in sight of my window will give a good illustration of the fortunes of this kind of warfare. Our friend, Richard Hanson, was returning with his wife from the inauguration ceremonies, and as he approached his house, which he had left locked when he went out, saw a gentlemanly looking man coming out at the back door. Mr. Hanson stepped forward and accosted him with the inquiry, why he had been upon his

premises. The man replied that he had only stepped into the back-yard. Mr. Hanson laid his hand upon his collar, and said to him, "You have been in some mischief, sir." The rogue immediately broke loose and ran, dropping a number of silver forks and spoons scattered on the pavement. Without stopping for the silver, Mr. Hanson pursued, shouting "stop thief," for some forty rods, when three gentlemen seized the rogue, and after a severe struggle, secured him. He was taken to the police office, where he was searched, and all the jewelry of the family, rings, bracelets, watches and the like, found upon him. Three other watches, some valuable jewels and three hundred dollars, with a large bunch of false keys, were also found about his person. It is probable that he will prove to be a rogue of sufficient note to be worth the capture. Mr. Hanson's resolute conduct with a man of twice his physical strength, is worthy of all commendation.

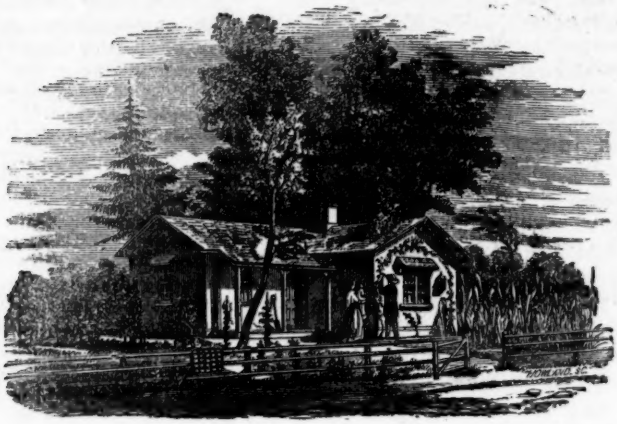
The city affords just now, not much of agricultural interest. On the last day of the session, an appropriation of sixty thousand dollars for agricultural purposes, to be expended under the direction of the Commissioner of Patents, was inserted in the miscellaneous bill and passed, so that we stand about as usual in respect to Government aid to agriculture. Last year the appropriation was fifteen thousand dollars larger, but that amount was specially applied to the importation of sugar cane cuttings from the South. A resolution to print two hundred thousand copies of the Patent Office Agricultural Report for 1856 was also adopted. This is the same number that was distributed last year, and probably is the greatest amount ever printed by any government, of any document for gratuitous distribution. The cost of the volume to the government, I am informed, is sixty-two cents a copy. It is hoped that our best agricultural men at the Patent Office may be retained in their positions. They are rapidly systematizing the business of the department, and yearly making manifest improvements in the Reports, and are expending the money committed to their care as profitably as any funds that are used for any purpose connected with public affairs. In haste to leave for my home in the North, I remain yours, &c., H. F. FRENCH.

A WATER-PROOF MIXTURE FOR LEATHER.—Take one pint of tanner's oil, half pound tallow, a lump of good rosin, the size of a common shell-bark, burgundy pitch, size of a hen's egg, lamp black, three cents' worth—mix together, and melt gradually over a slow fire. When to be applied, the mixture should be made about milk warm, and put on with a clean sponge. The leather may be made a little damp, not wet. The above cement, when applied to boots and shoes, will effectually prevent their soaking water, and keep the leather pliant and the feet of the wearer warm and dry. Every farmer who regards comfort as a desideratum, should supply himself with this article, and apply it to his boots and shoes.—*Germantown Telegraph.*

THICK AND THIN SOWING.

Never in our remembrance did corn of all kinds look more encouraging than at the present time; and where it is isolated and not planted too thick, an unusually abundant crop may be expected. Last season we stated the possibility of obtaining from single grains of wheat, at the extreme distance of 3 feet apart, upwards of 80 perfect ears, containing 50 kernels each, or more than 4000 fold. Our specimens of last year, and of the growing crop this season for inspection, corroborates the assertion. This gives upwards of 10 quarts per acre, from two pints of seed. We are also prepared to prove that isolated plants, one foot apart, at about six pints of seed per acre, will, under judicious treatment, also produce as great a crop; but if planted closer than this standard, it is an utter impossibility, as the plants then cannot perform their natural capabilities. Respecting the opposite extreme—thick sowing, we now make the bold statement that every grain of corn, whether wheat, barley, or oats, sown in the United Kingdom, simply from its extreme thickness, does not, and cannot yield one ordinary ear, say 40 fold, (nay, not even half as much,) from each grain; and were it so, as a necessary consequence, it would produce, of course, 40 times as much per acre as is sown, say two bushels or 128 pints of wheat, and 3 bushels or 192 pints of barley and oats, as an average quantity of seed usually sown. But such crops are never realized. Objections are raised, that by thin sowing, late mildewed crops are sometimes the consequence; granted—but sowing early will be found to obviate this evil, and insure more forward and bountiful harvests.—*English Agricultural Gazette.*

CHINESE SUGAR-CANE.—One of the important novelties of the season, has been the Sorgho, or Chinese sugar-cane. This we have raised to perfection, and are now prepared, free of cost, to furnish to subscribers seed raised by ourselves in the most careful manner. This plant is undoubtedly destined to find great favor for *soiling* cattle, and small quantities of sugar and molasses may be made from it. We doubt, however, the practicability of sugar-making in the large way from the Sorgho, or any other plant, so far north as New York. The time of ripening is so late, that the sugar-making season is too short for large operations. It must be remembered that the machinery for a sugar estate of fair size, costs from $20,000 to $50,000, and that too, in localities where the sugar-making season, or time between the ripening of the canes and frost is many times greater than here, consequently both the cost of machinery and impracticability of obtaining the necessary number of workmen for so short a time, renders sugar-making in this vicinity of doubtful expediency. There can be no mistake, however, in the value of the crop for general purposes. The Sorgho cures readily, is less inclined to ferment and acidify than other kinds of sugar-cane, and when well-grown and cured, is preferred by most animals to any other fodder—therefore it should be grown largely. We shall keep a close watch on the operations with this plant, and shall report fully as the facts are developed.—*Working Farmer.*



A SMALL COTTAGE.

We present this week another of those beautiful designs from "Village and Farm Cottages." The house is very small, but is sufficient for the wants of a small family, and is such a one as many a laboring man would rather own, and be independent in possession of it, than be subjected to the necessity of hiring a house of larger pretensions.

We are confident that almost any man can be enabled, by industry and proper economy, to erect a dwelling for himself and family, as pleasant, to say the least, as the one here given, and by these means can free himself from the unwelcome tax of an annual rent.

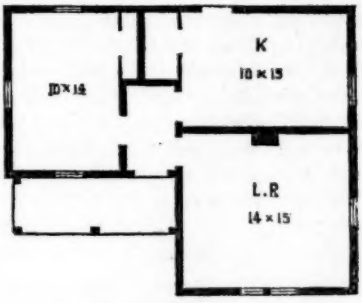
This house is also one which might be erected by any farmer at slight cost, for the use of his hired laborers, when, as in many instances is the case, it is inconvenient to have them live under the same roof with himself.

The arrangement of this cottage is simple and convenient, and the neat finish of the exterior harmonizes well with the modest pretensions of the plan :—

"The cornice is unornamented, the front door plain, the window cases are strips of plank sustained by three-cornered blocks. An evident purpose pervades every part of the plan. At first it looked so plain, compared with neighboring houses, which were tricked out in gingerbread finery, that people laughed, and called it barn-like. Not so now. Prairie roses, planted by the owner's own hand, already supply the want of pilasters and cornice. Honeysuckles will soon climb the slender columns of the verandah, and hang between them in fragrant festoons. Ere long, grape vines will display their purple clusters where the bean poles stand. The maize-patch, at present somewhat too near, will be replaced by grass and flowers, and then, perhaps, some who scorned the homely dwelling, will stop to gaze, and long to enter."

To possess a claim upon the soil of his native or adopted home should be the first object of every young man; and we present this plan in the hope that it may incite even the humblest ambition, by showing that beauty and comfort are not inseparable from wealth, but are within the reach of all.

Cost of building $650.



CARVE OUT YOUR OWN WAY IN THE WORLD. LEAN ON YOURSELF.—It was said by the great Clarendon, that "there is no art or science that is too difficult for industry to attain to. It is the gift of tongues, and makes a man understood and valued everywhere. It conquers all enemies and obstacles, and makes fortune itself pay contribution." It is independent itself, and can laugh at the puny attempts of those who have put money in their pockets and may wish to embarrass free action and

free thought. Industry is the wand which brings fortune at its call, and makes the penniless man equal to the millionaire. With his good right arm he can earn his bread, nor stops to see in which quarter sits the wind of patronage. Patronage! We detest the word. It implies something given and not earned — accorded by bounty and not wrought by brains or hands! 'Tis this word which has prostituted the press—this daily seeking for aid by advocacy of this man's claims or that man's opinions, which makes a public press the menial for some ambitious charlatan in his pursuit of greatness. But free from such dictatorship, acting only in accordance with a feeling that it is to right—toiling ceaselessly while others rest, the man who brings this great lever of industry to his aid may bid defiance to "outrageous fortune," and feel secure against all the world. 'Tis said by the poet, that "There is a divinity which shapes our ends," and we believe the good genius which guides it, is that untiring industry that asks only from mankind the fruits of labor bestowed.—*California Globe.*

For the New England Farmer.

CATTLE MARKET REPORTS.

Mr. Editor:—The question has often been asked me in and out of our State, "what agricultural paper do you prefer?" My answer is that all things considered, I prefer the *New England Farmer* to any other paper devoted to the great farming interest of Massachusetts and New England. But there is one particular, Mr. Editor, in which I think the *Farmer*, as well as all other Massachusetts agricultural papers, is sadly deficient.

I allude to the meagre, short and unsatisfactory reports of the great cattle markets at Cambridge and Brighton. More than one-half of the entire annual produce of the stock-raising farms of New England consists of neat stock, horses, swine and sheep, a large portion of which are taken to Cambridge and Brighton for sale; enough, at any rate, to control, so far as beef, pork and swine are concerned the price of almost every animal of those classes throughout New England; amounting to a number of millions of dollars every year. Now what can I know of the weekly sale of cattle at Cambridge and Brighton, from the shallow and insignificant reports given by any paper that attempts to report them.

Sir, I think very few of your readers anticipate the mail that brings their weekly *Farmer* with more anxiety than myself, or read with more interest its valuable contents. But what can I know of the value of beef, mutton and swine in the stall, yard or pen, at home, by the reports of the Brighton markets? Absolutely, just about nothing at all.

Look at the reports of Solon Robinson, in the New York *Tribune*, of the great cattle fairs at New York city. Every week, some two columns of the fine, close type of that paper is occupied with a minute account of all the cattle at market. Giving, not only the exact number from each State, but the name of the farmer by whom fattened, the name of the purchaser or drover by whom brought to market, the name of the salesman and purchaser or butcher; giving the estimated weight of the beef in the quarters, noting carefully the price of each drove, and giving the weekly variations in the prices of any and every grade of animal and meat at the market. And then his practical remarks and suggestions to the farmer, connected with his market reports, making, in all, a document worth, to every stock-producer in New York, and all the great stock-producing States of the West, ten times the annual subscription of that great paper. Why, any farmer of good judgment can tell within three dollars the value of an eighty dollar bullock in his stall, by the *Tribune's* reports. What can I know, I ask, of Cambridge and Brighton markets, by the reports of the *Farmer*? And I think they are quite as good as those of any other paper. Just about as much as the court found out in a case of assault, by the testimony of the witness who said the stone thrown at plaintiff was as large as a piece of chalk, and not much more.

Sir, your paper was started, and is still published with the professed desire of benefiting the farming interests of New England; and it has been patronized by thousands of the most intelligent farmers, with the same purpose; allow me to add, that in most respects, that purpose has been well accomplished. But in relation to the sales of millions of our farm produce annually at Cambridge and Brighton, we say, give us "*more light.*"

What say you, brother farmers of Massachusetts, Vermont and New Hampshire, will not the *New England Farmer* be still more valuable to you with a full and complete report of the transactions of the great market days for the sale of the staple produce of our farms, than it now is, as highly as you prize it? Would not such reports as we desire, increase the subscription list of the *Farmer* five hundred or one thousand within the first year? I believe it would. At any rate, it would deserve it. Would not such reports have a tendency to prevent this whispering-in-the-ear sort of trade, so much practised at Brighton, by which the dishonest drover and butcher may, and do, no doubt, sometimes defraud the honest farmer out of five to ten dollars in a yoke of fat cattle. I do not wish to insinuate that the drovers and butchers are more dishonest than others as a class, but the limited information that the farmer can obtain of the Brighton and Cambridge sales, makes him liable to be defrauded in the sale of his stock.

I am, dear sir, for progress and improvement, most cordially yours, Joshua T. Everett.

Everettville, Princeton, 1857.

Fattening Properties of Peas and Beans.—These articles have been found by chemical analysis, rich in nitrogen. The inference has been that they would be specially useful in supporting the waste of the muscles of animals, and it has been suggested that they would be particularly useful in the production of wool. They are evidently valuable for these purposes, but not the less valuable for the production of fat. Those persons who have used peas for fattening hogs, consider them worth as much as Indian corn. In districts where that grain is not grown, very fine pork is produced from peas. Dickson, in his work "On the breeding of Live Stock," states that a sweep-stakes was entered into between five East Lothian farmers, to be claimed by the one who should be pronounced the best feeder of cattle. Forty cattle of the same breed, and in equal condition, were divided between them, as fairly as possible. They were put up together the second week in September, and killed at Christmas following. The winner of the stakes fed his animals wholly on *boiled beans* with hay.—*Ex.*

For the New England Farmer.

"BLACK TOOTH IN PIGS."

MR. EDITOR:—There has been much said and written, for a year or two past, about the "black tooth in pigs." Now, I would like to know if any one ever saw a pig, from the age of two to eight weeks old, that his teeth, or "tusks," were not more or less black. I have examined the teeth of a great many, of the ages above named, and broken off the teeth of whole litters, when they have begun to be afflicted with this disease, and have always noticed that the healthiest pigs had the blackest teeth.

Whether it is the teeth or not that are diseased, there is something that many times proves fatal to early pigs, to a wide extent, and universally, I believe, goes by the name of "black tooth," the symptoms of which are so generally known that it would be useless for me to describe it, or its symptoms. But, be the disease what it may, I have thought that breaking off the teeth has prevented them from dying, when not too far gone, and prevented others from being thus afflicted. However, I believe that the breaking off the teeth is a cruel practice, and if proper care is used, unnecessary. I have noticed that it is early pigs, or those that do not have access to the ground, that are most liable to this disease; and that when I have given them a clean, dry pen, well strewn with wood ashes, and a good warm "nest," with a plenty of turfs of grass and dirt—if they cannot get to the ground themselves—I have had healthy pigs, and much prefer it to breaking off the teeth, as it answers a two-fold purpose of adding to the manure heap, and health of the pigs. To any person that has an early litter of pigs, and has not taken the precaution to lay by a store of turfs from the road-side for his hogs, in winter, if he will take the first opportunity as it thaws, and procure some for them, he will believe with me, that "an ounce of prevention is better than a pound of cure," so far as black tooth is concerned, if nothing more. E. S. A.

Jacksonville, Vt., Feb. 16, 1857.

REMARKS.—Hogs should *always* have access to the ground, and for breeding sows it is indispensably necessary. The want of this has been the death of many a fine litter.

For the New England Farmer.

A HORSE WITH THE STIFLE JOINT OUT.

MR. EDITOR:—G. W. Hayes, Jr., asks if there is any remedy for a horse whose stifle is out? I will give the following:—

Let the horse be placed on a hard, dry plank floor. Put a common stifle shoe, which can be had of any blacksmith, on the well foot, in order to make the horse stand on the lame foot till such time as the leg gets strong enough to work with, which will be in the space of from one to four weeks, usually in about one week. This may seem cruel, but it is the only sure way to cure a horse in this situation. I have known a horse worth two hundred dollars turned out to pasture in the spring because his stifle was out, and given away in the fall because he had not got well. The owner of this horse had another whose stifle was out, and attempted to cure him with a stifle shoe; he placed him in a stall where the mud was over his fetlocks, and led him out to water every day, and wondered why the horse did not get well; but after putting him on a hard floor and carrying his water to him, he recovered, and was at work in less than one week. Yours, &c.,

JOSHUA STURTEVANT, *Blacksmith.*

East Bridgewater, 1857.

LEGISLATIVE AGRICULTURAL MEETING.

[REPORTED FOR THE FARMER BY H. E. ROCKWELL.]

The *Ninth* of the series of Legislative Agricultural meetings was held Tuesday evening. The subject for consideration was, "FARMING IN NEW ENGLAND AND THE WEST." At nearly half-past 7 o'clock Hon. GEORGE S. BOUTWELL, Secretary of the Board of Education, was introduced as the chairman of the meeting, and on taking the chair he said:

I esteem it a privilege, gentlemen, to meet the Legislative Agricultural Society, and I can have no doubt that all the associations of farmers have been productive of good. Like every other institution, agricultural associations contain, or should contain, an idea; and that idea, I suppose, in agricultural associations, is this; that agriculture is not wholly a manual pursuit, but to some extent an intellectual one. And it is quite likely that we have not yet come to realize to what extent it is an intellectual pursuit. If we look at other professions and pursuits in life, we find that many, which a few years ago were regarded as manual pursuits, principally, have come to be, in their essential principles, intellectual. I think this remark may be applied to commerce, and especially to manufactures and the mechanic arts. Manufactures, to a very great extent, are sustained in this country and in this age by the development of the intellect. We do not rely to any great extent upon the physical capacities of men. In looking over this country, I suppose we should unhesitatingly come to the conclusion, that the ability of the people to produce, fifty years ago, was not equal to the ability of the same number of people at the present time to consume. That is to say, the consumption of a given population in 1857 far exceeds the ability to produce, in an equal population, in 1800. This increased ability of the people to produce has come from the development of the intellect. And we find that in manufacturing industry, success is the greatest where mind is the most perfectly developed. This may be illustrated by a reference to the East Indies, where labor is worth two or three cents per day, only, and where the people actually purchase garments, or cloth to make garments in England, or in New England, where labor is twenty or thirty times as much.

It is the intellectual power which merchants and

manufacturers have introduced into their departments of labor, which has diminished the cost of production; and it is well worth while for farmers to consider whether, by the introduction of a greater amount of intellect into their department, they may not increase and cheapen production. This view of the case has some bearing on the subject of discussion to-night, "Farming in New England and at the West."

If the profits of farming are to rest on two elements only, labor and land—the amount of labor, and the quality of the land—if no other elements are to enter into agriculture, then, of course, Massachusetts cannot claim to compete with the great West; but if, on the other hand, intellect, cultivated, active, persevering intellectual labor, be an element in agriculture, then it is a question whether farming is more profitable in New England or in the West. We have, also, in considering the relative profits, to take into view the influence of climate. In Massachusetts, I think it may be stated as a fact, that a man in health will labor, reasonably, three hundred days in a year, and be as well prepared at the end for another year's service as he was at the beginning; while I think it would be safe to say that in many parts of the West, a man could not labor to an equal amount more than two hundred or two hundred and fifty days in a year. As an element of the relative profit of agriculture in New England and the West, you have to consider that a man will labor from twelve and a half to twenty-five per cent. more here than there.

And the great fact comes from the constitution of man, which our friends in the West, if represented here to-night, would be unwilling to admit; but after all, we have the evidence in the nature of man and in all the history of man, that it does require some degree of opposition in man or in nature, to bring out the highest qualities of man. Just in proportion as you diminish the opposition of nature to the effort of man in agriculture, just in that proportion you diminish his perseverance, his disposition to overcome those obstacles. To be sure, agriculture may be so forbidding and discouraging in its nature, and in consequence of the obstacles to be overcome, as to deter a man from engaging in it; and if agriculture be that kind of pursuit in Massachusetts, of course it will ultimately have to be abandoned. But judging from the experience of two hundred years, we may come to the conclusion safely, that we occupy territorially, as a people, an intermediate position in this country. Our soil is not so fertile as to offer to man the means of subsistence without labor; and on the other hand it is not so sterile as to discourage him entirely. It furnishes obstacles and also demonstrates in the reason and experience of men that these obstacles may be overcome. Although I have never travelled in the West, I cannot doubt that agriculture is, in the nature of the case, and as a matter of fact, a higher intellectual pursuit in Massachusetts than it is in the West; and I venture to express the opinion that it always will be so. We may well consider that life, in its highest form, is not merely the acquisition of money. If the chief end of man be to raise the greatest number of bushels of wheat, or to fatten the greatest number of hogs, then, unquestionably, Massachusetts is the wrong place to attain the chief end of man. But if the chief end of man be to develop the moral and intellectual qualities with which we are blessed, I cannot see why Massachusetts, as an agricultural State, is not as inviting as any of the States of the West. It was my misfortune to have to examine some statistics based on the returns of 1850, and it seemed to me a remarkable fact or series of facts, which I have never seen successfully controverted, that Massachusetts, as an agricultural State, is the most productive in this union, including all our interests, agriculture, commerce, and the mechanic arts, and that Massachusetts, as an agricultural State, in the amount of its productions, estimated in dollars and cents, is superior to either Ohio, Illinois or Wisconsin. This may seem a remarkable statement, but I believe that it can be maintained. I was led to the investigation by conversation which I had in a railway car with a gentleman from Vermont, who said that the county of Caledonia, Vt., in proportion to its population, was the most productive territory in the Union. I was led to investigate that singular statement; and although I found it erroneous in some slight degree, it after all contained the essential truth which my subsequent investigations confirmed, that Vermont and Massachusetts, as agricultural States, are superior to either of the three States I have named; that is, dividing the whole value of the land among all the people upon the land. Or in other words, taking the agricultural productions of Illinois, and distributing them among the people engaged in agriculture, and those productions in Massachusetts and dividing them in the same way, and I found them to be greater here than there.

Mr. BUCKMINSTER, of the *Ploughman*, expressed his gratification at the view presented by the chairman. He said he had investigated the subject since the last evening. A friend who resides seventy miles west of Chicago, told him that he could produce one hundred bushels of oats to the acre, and corn in great quantities, and he had a ready market for all he could produce, and got ready money. His land was so rich, that though he had five hundred bushels of manure near his barns, he had no use for it. He said it was quite healthy also in that vicinity, and there were pretty good advantages as to schools, churches, &c., but after all, that gentleman has returned to Massachusetts to live. His family could not be contented there.

It is sometimes said that it is difficult to secure

capital for farming in New England; but it is more difficult to obtain capital at the West. It is the boast that more is done in Massachusetts to foster agriculture than in any other States; but it behooves the farmers to see to it that more still is done. The way to prevent young men from going away to the West, is to use the means we can to increase the interest now felt in agriculture. Men who have capital, should encourage young men to remain in this State, by aiding them in their efforts to carry out their operations in farming here; and when they will do that, as they do in mercantile pursuits, the superiority of our State as an agricultural State will be seen. He closed by urging the cultivation of a taste for agriculture in the young, and that should commence at a very early age.

Mr. WETHERELL had great faith in Massachusetts soil for the purposes of agriculture. There are many things that appear inviting to the young in the idea of going West; but most of those who go, will desire to return. He said, that several years since, a friend of his who was largely interested in land at the West, urged him to go and settle there, using as an argument, that he could have a farm for each of his children if he would go there; but if he remained here there was no probability that he could thus provide for a family. He, (Mr. W.,) replied that he would, if he had a family, rather have them trained and educated in Massachusetts than to give each of them a farm. He had since that time been through much of the West, and that idea was fully confirmed. Nobody makes money at the West by farming; those who have made money have done it by the rise of land, or other speculation. If the objects for which a man lives are not money or land only, he would not advise any one to go West. In all his travels there, he had never found but one New England woman who was not homesick. He visited a church in one of the oldest counties in Illinois, and he found it less neat and comfortable than the livery stables of Boston. Bad water, bad houses, no barns, and other inconveniences, go to show the disabilities under which farmers labor; and the fact generally is that men cannot labor there near as well as here. The crop of corn, although great, could not formerly be sold for more than twelve or fifteen cents a bushel. Wheat is not a profitable crop except in the part of Illinois called Egypt. Wool is not a profitable production either. They had, when he was there, a few years ago, three kinds of hogs. The first kind were called *three row hogs*, because they were so thin and long they would eat the three outside rows of any field by reaching through the fence; another kind they had to soak before they would hold swill in the spring; and another kind they called the *nine mile hogs*. No young man who could afford to live in an old State would ever desire to live in a new one.

Mr. WARD, of Orange, admitted that if the question was where a man could live most comfortably, he would not defend the West. But when the question is confined to farming the state of the case was different. True, the water is bad, and the climate did not suit New England men, and fever and ague is common; but consumption, which is so common here, is unknown there. The advantages of farming were then enumerated. Among them an important item is that no manure has to be carted. It does not require any ingenuity to raise crops, and the crops of corn may remain in the field and be harvested at any time during the winter. The hogs and cattle of Illinois were also defended. Many Suffolk hogs are to be found there, and some of the best kinds of neat stock.

Mr. BROOKS, of Princeton, claimed that although the crops in Massachusetts are not so great as at the West, the profits were greater here. The average price of corn for twenty-five years has not been over twenty-five cents a bushel in Illinois; they cannot make more than $7,50 profit on an acre of corn; and according to prices here, the profit is $20 an acre. True, they can cultivate more land with the same labor. But allowing they cultivate four acres while we cultivate two, the profit is still in favor of Massachusetts. Farms in good situations in Illinois are almost as expensive as in this State. Then as to the diseases, he thought the consumption was to be preferred to the fever and ague.

Mr. SHELDON, of Wilmington, was glad there were people who were ready to go West, for it was an advantage to have people there to create a market for our products. We get corn as cheap now as we did sixty years ago; potatoes and turnips are higher. He knew a man who told him that he himself raised at the West six hundred bushels of corn, for which he got ten cents a bushel. A pair of boots cost him from $5 to $7, so that it would take sixty bushels of corn to buy a pair of boots. A young man there cannot live as we do here and lay up any money at all by farming. They practice self-denial, and are obliged to do it to a great extent, in order to live there.

In concluding, Mr. Sheldon stated a fact with reference to the time when pine trees may be trimmed and not be injured by a tendency to a flowing of the sap where the limbs are cut off. He had learned of Deacon Levi Parker, who had tried it for twelve years, that the proper time is from the 20th of May to the 10th of June.

Mr. HUBBARD, of Michigan, was then called upon, and he spoke at considerable length in defence of the West, particularly of the eastern portion of Michigan, where he claimed that the people had not only some of the best land in the world, but had as good houses, churches and schools as are to be found in Massachusetts. He had not

heard of any man there who desired to come back East to live. As to the article of wool, he said they could get more, per pound, there, than the farmers of Massachusetts can for theirs, although the latter are by the side of the manufactories that use it.

The discussion was quite an animating one, drawing out the advocates of the respective localities in strong defence of them, and exciting the interest of those who did not participate in the discussion to an unusual degree. The President announced the subject of the next meeting to be, *"Fruits and Fruit Trees."*

For the New England Farmer.

ABOUT HORSES.

When railroads were first introduced, and heavy teams and stages left the "great road," that had so long been tenanted by a multitude of horses, it was thought that these useful animals would become almost as cheap as they are in some parts of South America, where the beggars go mounted. But how different the result, already. You can hardly get a respectable horse for one hundred dollars, now; while for one that makes any pretensions to grace or handsome movement, the price is—according to the purse of the purchaser—all the way from two to four hundred dollars. Horses have increased in price tremendously, since the introduction of steam travelling and transportation. People travel more than they did in old stage times. A certain part of most journeys is almost invariably made by the aid of horse power. One four-horse coach used to leave Concord for Boston every morning. Now about eighty passengers by the cars. These must be got to the depot with horses. Then look at the freight. Since railroads begun their great work of helping on the march of civilization, what tons and tons of heavy matter pass into the city, and from the city to the country, in the convenient cars. This merchandise is usually transported at each end of the railroad route by horses.

In addition to the increased number of horses used about railroads, a much larger number are kept employed on farms. It is found that a pair of horses, for steady work on a level, clear farm, are more profitable than a team with horns. They stand the heat better. They can be hurried when work presses. They can be harnessed into a greater variety of carriages and implements. The horse plows, harrows, rolls, &c.; he drags the cultivator, the mowing machine, the horse rake; goes to mill and to meeting.

An animal of such great usefulness deserves kind attention. His food should be generous, his stable warm and comfortable, his harness soft and pliable, and suitable for his work. It is a settled fact that it is better to give a horse grain mixed with hay or straw. The stomach of the animal is adapted to grazing as well as to dry fodder, and requires considerable bulk in the aliment, in order to the exercise of its functions with ease. The grain will be better digested, if mixed so that the animal will be obliged to eat a less stimulating article with it. A horse kept in a warm stable will consume less food than one in a loose, windy room. Animal heat is kept up by the combustion of food, as certainly as the heat of a room is by the fire.

Concord, Mass., Jan., 1857. W. D. B.

NEW BOOKS.

Villas and Cottages. By Calvert Vaux. Architect. Harper & Brothers, New York.—This is a book of 318 pages, printed on fine paper with large type, and is illustrated with 300 engravings. Mr. Vaux was the partner of the late lamented Downing, and has deservedly a wide reputation for skill and taste in his profession. A short extract from the preface of the book will show the reasons for publishing. He says:

"The accompanying designs have been prepared within the last few years to respond to the varied requirements of different parties who have asked for them, and it is conceived, therefore, that they may possibly represent, to some useful extent, to those who are about to build in the country, the accommodations and arrangements for convenience that appertain to such buildings. They are not brought before the public as model designs, to lessen the necessity for the exercise of individual taste, but as far as possible to increase its activity."

Those intending to build cannot fail to be greatly benefited by a careful examination of this and similar works.

The Anatomy and Physiology of the Horse. By George H. Dadd, Veterinary Surgeon. John P. Jewett & Co. Boston, 291 pp.—The title indicates what the book is; at its close, there is appended a "Dictionary of Veterinary Science," which would be valuable to any farmer. The work is in Jewett & Co.'s excellent style, and we have no doubt is one of merit, and therefore wish it an extended circulation. No man surpasses Dr. Dadd, in devotion to the science which he has chosen to pursue, and in which we think he is doing the world good service.

For the New England Farmer.

"THE NEW ENGLAND FARMER."

Few words in the English language are more expressive than those we have chosen for our heading. None, perhaps, are more euphonious in sound, or grateful to the sight. Like the words, mother and home, they recall many pleasant memories, and beguile the tedium of life with their refreshing melody. The *New England Farmer!* What a substantial phrase! How visions of comfort and refinement rise to the mind. How the rural and literary seem to blend, as the academy or schoolhouse nestles in the centre of the hamlet. How the religious and secular appear to harmonize, as the village church lifts its tall spire in the midst of the farmers' homes. How the quiet of the country is modified by the bustle of the adjacent town or city, and the gaiety of the city subdued by the nearness of the sober country. Here labor and pleasure meet in delightful communion, and nobility and economy seem compatible with each other. Here the "plow, loom and anvil" are brought into juxtaposition, and variety renders toil attractive, and work pleasant. Here, too, society is fixed, stable and well ordered. Here are religious, charitable and educational institutions in healthy operation. Here are old homesteads, and antique trea-

sures, and humanity, venerable with age. Here are papers, and books, and pictures, on almost every table, and shelf, and wall. Here are social firesides, and pleasant companions, and happy homes. Here, too, are "fair women and brave men."

It is true that we have some narrow valleys, and long hills, and everlasting mountains. It is true that there are some intractable soils, and rocky ledges, and icy winters; but as an offset to all this, we raise *real* men, and export this commodity to every market in the world. Go where you will, from the frosty Arctic to the fiery equator, and some Yankee has preceded you. There is not a clime or country where their voice is not heard. Wherever conquest can be made, or discovery gained, or daring adventure rewarded; wherever enterprise can be gratified, or fame acquired, or wealth secured, there you can find New Englanders. But this emigration of her sons is the very *bane* of New England. In giving her treasures to others, she has robbed herself. Of her 41,500,000 acres, only 11,000,000 are improved, and the average value of her lands is not far from $20 per acre.

Not one-third of the agricultural or mechanical resources of New England are developed. Here are lands rivalling the West in cheapness. Here are "valleys to be clothed with corn, and hills to be covered with flocks." Here are crooked things to be made straight, and rough places to be made plain. Here are rivers and winds waiting to be tamed and used. Here is steam and electricity asking to be harnessed and driven.

Here, in short, are privileges unequalled, everything, except her *most enterprising sons.* New England will not become perfect till she retains these. Let others talk of the savannas of the South, and the prairies of the West, my theme and home are the *New England hills.* I had rather be called a New England farmer, than by any other name under heaven—except Christian.

J. N. B.

For the New England Farmer.

CULTIVATION OF FOREST TREES.

Mr. Fay, whose judgment and experience is well affirmed, is represented at the late Farmer's meeting as saying, "that the only way to realize good trees was to sow the seeds in a nice plat of ground, and after two years transplant them to properly prepared soil."

If Mr. Fay made such a declaration, I beg leave to demur to the propriety thereof. I respectfully say, that the seed should be planted in the *very spot* where it is intended the tree shall continue to grow until it arrives at maturity; and that any removal or disturbance of the roots materially mars and prejudices the power and force of its growth.

I know this to be so in relation to fruit trees, such as the apple, pear, and peach—and believe it to be so in an especial manner in relation to forest trees of every description. Who ever saw in any transplanted plantation, oaks so healthy and vigorous as they have seen in groves, where the hand of man never ventured? I believe the natural covering that accumulates in the shade of the forest, and softens and ameliorates the soil, is peculiarly favorable to the advance of the young trees; and that there is no artificial application that will begin to compare with it. JUVENIS.

March 9, 1857.

For the New England Farmer.

LITTLE THINGS.

OR A WALK ABOUT THE HOUSE—NO. 10.

If the lower box in your copper pump sticks fast, throw some hot water on to the outside and expand the tube, when it will easily be removed.

If the top of your fluid lamp cannot be started, hold the outer portion in the steam of the tea-kettle and it will start.

If you wish to make the labors of your domestics easy, have a large scuttle with a trap-door in your back room down which they can throw their dirty water on washing days, and let it pass off, if possible, into your barn-cellar through a covered drain.

If you are building a new house, be sure and cover the upper part of the sill with a solid bed of mortar after it is boarded and the under floor laid. This will prevent the air from coming in beneath the boarding into the cellar, and more effectually produce dead air within the walls. It will also prevent the rats and mice from ascending between the walls.

If you are a farmer, when you set a boiler for washing purposes, set another by its side of iron for other purposes. It will cost but a trifle more while you are about it.

If you feel nervous and sleepless on a bright moonlight night, shut out the light entirely.

If you wish to keep the female domestics happy, cut up two or three cords of wood into kindlings in the spring for summer use. They love something that will blaze well, but in small quantities.

If the plaster on your rooms has shrunk so as to show large cracks, before you paper your rooms, take a little plaster of paris, put it in a kettle and heat over the fire to drive off the water; or, which is the same thing, take calcined plaster, put in equal portions of that and quick-lime and a little molasses with water, and with a case-knife fill up every crack; an astonishing difference may often be noticed in the warmth of a room.

Can you tell for what purpose the eye of a sewing needle is grooved?

If you wish your wife to repeat poetry fashionably, let her have this line:

A bo-ee's weel, ees the weend's weell.
(A boy's will is the wind's will.)

If you wish your daughter to speak in the height of fashion, let her repeat this sentence: "Ees eet pawseeble that that ees a caow?"

Yours in the bonds of littleness, N. T. T.

Bethel, Feb. 25, 1857.

REMARKS.—Capital!

GAPES IN CHICKENS.—An Ohio correspondent gives the following remedy: "Feed little or none on corn-dough—but feed plentifully on cheese made of lobbed milk or clabber, crums of wheat and corn-bread. We also keep clabber in a trough always within reach of the young chickens. This we believe has been a perfect remedy in our hands for gapes, for the past seventeen years."

VALUE OF A SINGLE TREE.—The bark of an oak tree felled in 1810, in Monmouthshire, England, was sold for $1,000 and its timber for $3,350. Who planted that acorn?

For the New England Farmer.

TRANSACTIONS OF MIDDLESEX AGRICULTURAL SOCIETY FOR 1856.

This, the oldest of the Massachusetts family, now numbering not less than twenty, appears in all the sprightliness and energy of youth. Profiting by the short-comings of others in following the beaten paths of usage, without attempt at improvement, she has cast off all useless formalities, and given the public a pamphlet of 84 pages, of readable and instructive matter. First comes the historical reminiscences, showing who of our fathers had inquiring minds, and with what obstacles they contended. Then we find that much of the "head work" in olden time, as well as the present, has been done by the clergy. I have long been of the opinion that it was in the power of this class to benefit their people by attention to the labore of the field, as well as their exhortations from the pulpit. In so doing, they will, themselves, be in less danger of bronchitis, and other clerical infirmities.

Shorn as this society has been of two-thirds of its strength, we are quite astonished to find the recuperative power that remains. Had it not been for the ill-judged arrangement that crowds the exhibition of adjoining counties on the same day, I intended to have witnessed their doings. I am particularly pleased that my old friend Sheldon has proved his faith by his works, in the management of his dairy. His energetic perseverance is worthy of all commendation. I hope his brother legislators will profit by his example—close up their jobs in tinkering upon the laws, and be at home to attend to their *spring work*. ESSEX.

For the New England Farmer.

FAMEUSE APPLE.

POMME DE NIEGE.—*Downing.*
CHIMNEY APPLE, *of Lake Champlain.*
SNOW APPLE, *of Ogdensburg, Detroit, &c.*

MR. FARMER:—In your paper of January 27th, you have a very accurate and beautiful drawing and correct description of a seedling apple, growing in President Wheeler's garden, in this place, which is from seeds of the Fameuse, planted by himself; of course it is one of his special pets. I at once recognized the drawing, and description of the tree as the President's favorite, and on inquiring of him, found you had taken your specimen from his seedling, which is a little more round in form, and the tree more pendent in growth than its parent, the Fameuse.

The Fameuse is an apple which may be called the parent of a class, as much as the Rhode Island Greening or the Esopus Spitzenberg. It is a fine grower when young, of an upright, irregular habit, and a great bearer in alternate years; requires a deep, moist soil, and succeeds well in a high latitude. There is not the slightest reason for calling it a Canadian apple. As well might we call the summer Bon Chretien a Canadian pear. Both were unquestionably introduced from France at the same time, and the last holds the same rank in Montreal for pears as the Fameuse does for apples, both being more extensively cultivated than all others.

The first apple trees planted in this valley were at Chimney Point, opposite Crown Point, or Fort Frederick, more than one hundred years since, by the French. From these trees scions were extensively scattered, and called the "Chimney apple." The first French settlers at Ogdensburg, Oswego, Detroit and Kaskaskia, planted the same apple, where it was called the "Snow apple." An intelligent French Siegneur, living eighty miles below Quebec, told me the only apple they had was the Fameuse, and that the trees were brought from France by the first settlers. The same apple may be found in London, imported from France.

Now Mr. *Farmer*, with all these facts, and many more, as lawyers say, tending to prove that wherever the first French settlers on this continent went, they planted this apple; can we suppose at that early day, a seedling with such a wide reputation had been produced in Canada? and before claiming it as such, ought not our Canadian cousins to give us some proof of it? It deserves a place in the smallest fruit garden, but is too delicate and juicy to be a proper market apple, as without great care they become spoiled by bruises and fermentation. C. GOODRICH.

Burlington, Vt., February, 1857.

For the New England Farmer.

MANAGEMENT OF STOCK.

MR. EDITOR:—Having spoken to you before on this subject, I now propose to look at the other side of the matter, and state how stock *should* be managed, and not how it is. As this is the season of the year when cattle are confined to the barn, (or should be,) I will state a few things which should govern farmers in the care of them. First, great regularity should be observed throughout in management. They should, an able writer says, be fed but little at a time, and often; because that experience has shown that animals that eat much in a short time do not fatten so well as those which eat less but more frequently. No more should be given than they will eat up clean, and with a good relish. Thirty-five or forty pounds should not be given a cow when twenty-five is all she will eat. If this course is pursued she will soon become dainty, and will not eat her proper allowance. Any one who will use a *little* observation, can very soon judge correctly how much each animal will consume daily, without the trouble of weighing. Change of feed is very essential. The common practice is to commence with the winter to use the poorest hay, and continue to do so until it is all consumed. This, in my opinion, is wrong. My method is, if I have poor hay, straw, &c., pass them through my cutting machine and mix them thoroughly, and in this way all are readily eaten; when, if either were fed separately, it would be very uninviting to their tastes. This is also the proper time to feed such roots as one may have to spare, for while they are being fed upon poor fodder, they need something to keep their bowels loose and active. Roots should be fed with the poorest hay, and while the cows are dry, but meal reserved until after they commence giving milk.

The tastes of cows must be consulted by the person who has them in charge, (which should be the owner,) for it will be found that they differ very much. To illustrate my point, if I never eat any fat meat, and my brother is fond of it, then why should I be compelled to pine away, because that is given me which is offensive, while he is made no

better by eating that which is my most natural food. It will be found that there is exactly this difference in the tastes of different animals, so that it is very important that each should have its own appropriate food. Care must be used, also, in watering. Every animal should have plenty of water, and that without going to some distant brook to stand hour after hour because some one has stepped into the pool before her. Dr. Anderson says he knew a man who acquired much wealth by attention to things of this nature; and one of his principle discoveries was, the importance of having a continual supply of the purest water, which could be obtained for his cows. Keep no more cows than you can keep well; one cow well fed will produce as much milk, and more butter, than two indifferently treated; and if the cow is wintered badly, she will rarely recover during the succeeding summer. Cows should by all means be housed in winter, and particularly those which give milk, or a failure in the quantity of milk will be experienced; therefore, instead of keeping twenty cows poor and but half of them stabled, sell ten and give the remaining ten food in amount equal to what the twenty originally had.

AMPLIFICATOR.

ORCHARD GRASS.

(DACTYLIS GLOMERATA.)

At the North, this grass is as yet but little known. In almost every case where its cultivation has been attempted, however, it has proved itself a very prolific and valuable product. A gentleman assures us that the term "orchard grass" is no misnomer. He has grown it for five or six years with great success, in an orchard, the soil of which had failed to produce any other grass; a circumstance attributable, as he supposed, to the dense shade cast by the trees, the arrangement of which was so crowded as effectually to exclude the rays of the sun, and to create an atmosphere much too pent and suffocating to admit of the healthful development of the more common kinds of grass. He is so well satisfied of the superior value and excellence of this kind of grass, that he has determined henceforth to cultivate it in preference to all other kinds; he also speaks of experimenting with it in his pasture grounds, and on light soils, as a succession for clover, timothy and other common grasses.

We have frequently perused favorable notices of this production in our agricultural journals, and although we have had no experience ourself in its cultivation, we are nevertheless strongly inclined to regard it, all things taken into consideration, as a valuable production, and as an acquisition to our husbandry of no insignificant value, especially when considered as a pasture plant.

On orchard lands, where the soil is of a light, sandy description, it roots with great vigor, and soon forms a close and dense sward which sends up a succession of strong, succulent spires which may be cut two or three times in a season. Cattle are remarkably fond of it in a green state, and when cut and cured as hay. The yield, reckoning the several cuttings, is greater, probably, than that of any other grass known.

For the New England Farmer.

ONION CULTURE.

It is well known to those conversant with the culture of the onion, that a distinct variety in the form of this vegetable has been brought about, within the last twenty years, by care in the selection and growing of those to be used for seed. Instead of the *flat, thin* onion, one *round* and *compact* is now grown, and much preferred by those who grow, and those who use them.

Of late, it has been stated by a horticulturist of high authority, that onions of this class are much more liable to rot and decay than the others, and therefore he would dissuade from growing what is called the *improved Danvers onion.* I have made inquiry of those best experienced in the culture of this vegetable, and learn from them that this gentleman's theory of decay is visionary, and fanciful entirely; and that they have now hundreds of barrels of onions on hand, in best possible condition. It is true, there was more of *rot* the last season than has been common for several years, but this was probably caused by the superabundance of moisture, in the months of August and September, and not from any special defect in form. We do not object to theoretic speculations, by those who understand what they are speculating about, but we have much more confidence in the *practical facts,* drawn from the experience of the cultivators themselves.

P.

South Danvers, Feb. 25, 1857.

REMEDY FOR HOG CHOLERA.—Salt, sulphur, charcoal—equal parts—in their food; table-spoonful of the mixture twice each day. Keep the animal warm.

DR. DADD.

For the New England Farmer.

UNDER DRAINING.

In draining grass lands, where the soil is not too stony or rooty, to admit of the use of the "Double Michigan" plow, I have found that plowing and seeding in August and September on turf turned over with this plow, has answered every practical purpose, and is the cheapest mode of draining. The furrows must run up hill and down, and if they are turned properly, each furrow, when the turf is turned under, will serve the purpose of a water course or drain which will last several years; as long, at least, as the land ought to be cropped:—then turn over again, manure and seed down. If the land is very wet, let it be plowed in small plats, from one to two rods wide, and the land furrow will answer the purpose of a deep drain.

There is also a double advantage in this mode of treating grass land. Swale and poor grasses, pod, rushes, &c., will always be found in wet lands, but if you turn these root upwards and cover with subsoil, as the "Double Michigan" plow will do, you will have, after seeding, a crop of clear, first-quality English hay, besides the advantage of having the land drained. J. S. S.

Greenfield, March, 1857.

For the New England Farmer.

ONE-HORSE POWER FOR CUTTING HAY.

Mr. Editor:—*Sir*—I have been much pleased and interested in the many improvements which are encouraged and suggested in your valuable paper, especially in the improvement of agricultural implements.

There is one thing which, it appears to me, is yet lacking, and which I think would be of more substantial benefit to the farmer than any one of the inventions of the last fifty years. I refer to a one-horse power hay and straw-cutter, one that can be placed in one end of the barn floor, and be stationary through the winter, so that a horse can be hitched in every morning and enough hay, straw and corn fodder be cut in a few minutes to last the entire stock through the day, probably in the same time it would take a man to cut for a span of horses by hand. Up here in Vermont, where hay and fodder of all sorts is cheap and plenty, it is too laborious, in addition to all his other duties, to do much with these hand machines. In cases where a man has but two cows and a horse, and no other work driving, it would be different. I think they are not used by our large farmers more than half as much as they were a few years ago, when they were new, and there was a little excitement upon the subject.

I know of one of our best farmers who bought one for ten dollars; soon getting tired of that, he bought another for eighteen. Being in his barn floor a few days since, and seeing one of them stowed up in one corner, I asked him, don't you use that? "No, want to sell it." "Don't you use the one in your horse barn?" "No."

Now, it appears to me, if farmers had one of the one-horse power, rightly constructed, they would not use any straw but what they cut; even if it was for litter, it would better absorb the liquid, be worth more in manure, and be much less trouble to the shovel and harrow. The advantage this would give him of cutting and mixing his different kinds of fodder, besides other purposes to which the power might be appropriated, a circular saw to saw his wood, a grindstone to hitch it to in hay season, a washing machine for Mondays, a churn, a thrashing machine, a corn-sheller, &c.—Might not something be done by our agricultural societies to encourage an improvement of this kind? I throw out these hints, that others, more able than myself, may give the subject attention, and that I may avail myself of their judgment, whether it would be a profitable outlay for me, o. farmers generally. M. A. Banter.

Norwich, Vt., 1857.

EXTRACTS AND REPLIES.

THE HORSE.

Mr. Editor:—For the benefit of some of your numerous readers, will you insert the following communication, and oblige a subscriber? I have recently lost a fine horse, on account of my ignorance concerning complaints common to that noble animal. Let me suggest to owners of horses, who may be as unacquainted as myself with diseases incident to the horse, to inquire of some horse farrier what is meant by *foulness* among horses. By attending to this complaint, the lives of many valuable horses, together with an incalculable amount of suffering, may be saved. A hint to the wise, &c.

South Reading, Feb., 1857. Greenwood.

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CHINESE SUGAR CANE—MANURE.

Friend Brown:—Please inform me the quantity of seed of the Chinese sugar cane required to plant one-eighth of an acre, and the best mode of planting the same?

Is horse manure injured by being permitted to lie in a heap, and heating through the winter? or would it not be better to mix with other stable manure or muck, and prevent fermentation, until wanted for use? and oblige a Subscriber.

Chittenden, Vt., 1857.

Remarks.—Less than a quarter of a pound of sugar cane seed is sufficient for quarter of an acre. Plant same as common corn—perhaps a little nearer together.

Mingle the horse manure heap with other manures colder in their nature, and overhaul once or twice before using.

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HEN MANURE, TURNIPS, POTATOES.

One of your correspondents some months ago said he had used the droppings from his hen roost, on his corn, and thereby killed his corn; I have never used it for corn, but have for turnips, with good effect. I have it mixed with some lime and mould from the woods. Last year I had 500 bushels from less than nine-tenths of an acre; I do not know if that can be considered a large crop, but I thought it was. I would also like to know if 900 bushels of Irish potatoes, from 2¼ acres of land, is not considered a large crop? When speaking of 80 and 100 bushels of corn to the acre, is shelled corn always to be understood? [Yes.—Ed.]

Isabella F. Evans.

Sunderland, N. Y., 1857.

MUCK AND LIME—LEATHER SHAVINGS—YOUNG ORCHARD ON AN OLD SITE.

I wish to inquire through your paper, which is the best way, to mix lime with muck or loam?

Are leather shavings, or sweepings of a shoe-shop, good to put around trees?

Will young trees do well set where there has been an orchard? B. S.

REMARKS.—Make a bed of the muck and scatter the lime over it, then another bed of 5 or 6 inches thickness, and so proceed. After it has been in that condition a few weeks overhaul it, and mix thoroughly.

The leather shavings should be used cautiously about young trees, if used at all. We have no experience in the matter. But the shavings contain a pretty strong acid which might be injurious.

A young orchard will grow well on the site of an old one, if you manure and move the soil well.

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BEETS AND PARSNIPS.

MR. EDITOR:—Can any one tell why so little attention is given to the culture of the beet and parsnip? Carrots are frequently awarded premiums by our agricultural societies, but very seldom is a premium awarded to these two articles; either from the fact that no one tries to raise them, or because of failure somewhere. Will some one that knows give me a hint?

CEMENT PIPES.

In laying cement pipes, how thick must the pipe be, with a bore of 1½ to 2 inches, to sustain the pressure from a column of water sixty feet in height, and what cement is the best for laying such pipes?

BARLEY MEAL.

Some one makes the inquiry in the *Farmer*, what the effect of giving barley to milch cows will be. A friend who has tried it, informs me that barley fed to milch cows will *fatten* them, but, being of a dry, heating nature, will *dry them up*. If you wish to dry up a cow to fat, give them barley; if you wish to get an abundance of milk, give something more succulent, and of a different nature.

Greenfield, March, 1857. J. S. S.

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FALL PIPPINS, AND THE BROWN APPLE.

To what purpose do you exhibit those beautiful engravings of fruit in your journal? Is it not to tempt us readers to procure the fruit trees for ourselves? Such being no doubt the intention, I am emboldened to ask your assistance in effecting that object, by informing my agents, Messrs. Nourse, Mason & Co., where to obtain a tree of the veritable Reinette Blanche apple, which you possess growing by your door, and which fruit is depicted at page 561 of your December number, 1856. Also, a tree, or scions of the new apple, from Feltonville, which appears at page 513 of the November number, in 1854.

I have been, for years past, making endeavors to form a collection of fruit trees of every desirable variety, with the view of ascertaining such as are adapted to our climate, in this far off and frigid corner of the habitable globe. No doubt I am a torment to N., M. & Co., and I hope you will kindly lend them your aid, and alleviate their trouble, by imparting the desired information; and so far gratify FAR EAST.

February 25, 1857.

REMARKS.—Of the Fall Pippin we can only furnish you half a dozen scions; but the tree itself may be found in most large nurseries. A few scions of the Feltonville, Mass., apple, may probably be obtained from Mr. G. S. Rawson, of that place.

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GRAFTING WAX.

Noticing a recipe in your paper of last week from the Keene, N. H., *News*, for making wax for grafting, it occurred to me of a better way of making it. I would, for various reasons, prefer linseed oil to the use of tallow. The following is my recipe:—Take one part linseed oil, two parts beeswax, and six parts rosin; varying a little in the quantity of oil, if necessary, for a proper consistency; in other respects, I would follow the directions suggested in yours. S. D. W.

Orange, March 3, 1857.

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LOSS OF PIGS AND MEADOW HAY.

I see in the *Monthly Farmer* for March, a communication from C. C. Grant, of Andover, respecting the loss of his pigs. Now I would like to inquire if his sow was not littered with meadow hay, as that appears to be poison to pigs. I have known several instances where pigs have died in a similar way, and in every case meadow hay was used for bedding. A case has just come to my knowledge where wheat chaff was used for bedding. The pigs began to fail, one died. The chaff was removed, and straw substituted, and the remainder of the pigs saved. ABEL F. ADAMS.

Fitchburg, 1857.

KEEP FRUIT TREES STRAIGHT.

Trees in an open exposure often acquire a leaning position from the prevailing winds. This should not be suffered beyond a certain stage of the tree. When as large as one's wrist, they should be set up erect, and, indeed, thrown into the wind at an angle of ten or fifteen degrees; in order to bring them ultimately into a straight position. This is best done by obtaining crotched limbs from the woods, eight to twelve feet long, and placing the butt end, which should be sharpened, on the ground, and the crotch end either against the trunk, immediately beneath the branching point, or against a large outer limb, if more convenient, securing it from chafing in the crotch, by a padding of straw, or litter, and setting the tree at once up to the desired angle of elevation. Loosen, also, the ground on the windward side of the root so that it will not bind, and the work is accomplished. Let this be done when the tree begins to make its summer growth, or soon after leafing out. One season, if the tree is thrifty, will be all that is required. If, however, it be obstinate, repeat the trial another year. The remedy is sure. Even large trees, which have acquired a permanent lean, may be thrown into an erect posture, by loosening the earth at the root, and occasionally cutting off an obstinate large root, without injury to its growth, and thus be made sightly. An erect tree will be longer lived, and more fruitful than a leaning one, and not half so subject to casualty as if left to its own guidance.—*Exchange.*

For the New England Farmer.

BUCKTHORN FOR HEDGES.

I should like to be informed through your monthly *Farmer*, the best way to raise buckthorn from seed, and how it should be finally set out and treated so as to make a strong and safe fence against cattle and horses. I want next spring to plant or set out hedges to considerable extent. I have been experimenting on the osage orange for two or three years, and while I find its growth is much more rapid than that of the buckthorn, I have become satisfied that it cannot be made to stand the cold climate of northern New England, and that the buckthorn is the true article for us to cultivate for hedges. We have now some evidence that more attention is being paid than formerly to planting hedges for ornamental fencing, and as our taste for ornamenting gardens and pleasure grounds increases, we shall find that well-trimmed hedges will be considered absolutely necessary to complete the arrangement of every piece of ornamental ground. I believe, sir, that this sort of fence will come to be considered by-and-by as safe and as cheap, if not cheaper, than any other fence for enclosing and dividing farm lands. I should be glad to see the subject discussed in your valuable paper. CHAS. BOWEN.

Montpelier, Vt., 1857.

For the New England Farmer.

THE SWALLOW FAMILY---No. 5.

BY LEANDER WETHERELL.

How find the myriads, that in summer cheer
The hills and valleys with their ceaseless songs,
Due sustenance, or, *where subsist they now?—Cowper.*

The stork knoweth her appointed times; the turtle, the crane and *the swallow observe the time of their coming.—Bible.*

Having, in the preceding articles on the swallow family, presented some of the most interesting and important facts connected with its summer visits and habits while here, it now remains to consider more directly the old, lingering and strange tradition that is still entertained by some elderly and very worthy people, that swallows hybernate, some in old walls, hollow trees, sand-hills, and other secure places, where they sleep until warm weather returns; and others pass the winter immersed under ice, at the bottom of rivers, ponds, lakes, and the sea, where they remain in a torpid state until summer calls them forth from their places of hybernation. Others, and with much more plausibility, maintain, that they emigrate to the moon and there pass the winter. And others still, with both probability and observation in their favor, regard the swallow family as birds of passage, emigrating southward to a warm climate, where they pass the time of winter in conscious pleasure, ministering, in the meantime, to the happiness of man, for whom they are and were created.

These various speculations concerning the brumal retreat of these birds have tended greatly to increase their celebrity among naturalists. The notion that they pass the winter in the moon's atmosphere, or in some satellite nearer the earth, as noted by DeWitt Clinton, has very few advocates.

More believe the myth that they sleep in hollow trees, caverns, walls and sandbanks. The ingenious Dr. Owen, in his "History of Serpents," was of this notion. But the testimony of Audubon already given as bearing on these points, after careful observation and examination with direct reference to these statements as found recorded in old works on natural history, is sufficient to undermine all such beliefs. He examined the "swallow trees" and the excavations of the bank swallows, and never found a solitary bird in the torpid state. This is the direct testimony of one of the most distinguished ornithologists that the world has ever known. It should, therefore, as it does, with the exception of a few rare cases, satisfy inquiring minds on this subject relative to hybernation.

Olaus Magnus, archbishop of Upsal, is said to have first broached the opinion that they hybernate at the bottom of lakes during the winter. He gravely says, "that these birds are often found in clustered masses at the bottom of the northern lakes, mouth to mouth, wing to wing, foot to foot; and that they creep down the reeds in autumn to their subaqueous retreats; that when old fishermen discover such a mass, they throw it into the water again; but when young, inexperienced ones take it, they will, by thawing the birds at a fire, bring them indeed to the use of their wings, which will continue but a very short time, owing to premature and forced revival." To show that the archbishop did not lack credulity, it appears, that "after having stocked the bottom of lakes with swallows, he stored the clouds with mice, which came down in copious showers upon the valleys and plains of Norway and the neighboring countries."

George Edwards, F. R. S., also member of the Society of Antiquaries, London, and an anthor of works on natural history, remarks that "some of our own countrymen have given credit to the submersion of swallows; and Klein patronizes the doctrine strongly, giving the following history of their manner of retiring which he received from some countrymen and others. They asserted, that sometimes the swallows assembled in numbers on a reed, till it broke and sunk with them to the bottom; and their immersion was preluded by a dirge of a quarter of an hour in length; that others would unite in laying hold of a straw with their bills, and so plunge down in society; others, again, would form a large mass by clinging together with their feet and so commit themselves to the deep."

"Such," says Edwards, "are the relations given by those that are fond of this opinion; and, though delivered without exaggeration, must provoke a smile. They assign not the smallest reason to account for these birds being able to endure so long a submersion without being suffocated, or without decaying, in an element unnatural to so delicate a bird; when we know that the otter, the cormorant and the grebes soon perish, if caught under the ice, or become entangled in nets; and it is well known that those animals will continue much longer under water than any others to which nature has denied that particular structure of heart necessary for a long residence beneath that element."

"Though entirely satisfied in our own mind of the impossibility of these relations," says Edwards, "yet desirous of strengthening our opinion with some better authority, we applied to that able anatomist, Mr. John Hunter; who was so obliging as to inform us, that he had dissected many swallows, but found nothing in them different from other birds as to the organs of respiration. That all those animals which he had dissected of the class that sleep during winter, such as lizards, frogs, &c., had a very different conformation as to those organs;

that all these animals, he believes, do breathe in their torpid state; and as far as his experience reaches, he knows they do; and that, therefore, he esteems it a very wild opinion that terrestrial animals can remain for any long time under water without breathing."

Aristotle and Pliny placed them in warm and sequestered places, not at the bottom of lakes, ponds and rivers. Says DeWitt Clinton, of New York, "reputable men, even in our own time, laboring under optical delusion, have declared that they have witnessed the descent of swallows into the Hudson, and the pond on Manhattan Island called the Collect. All these speculations and conjectures have yielded to the doctrine of emigration. Like all other migratory birds, the swallows congregate in flocks at the time of their departure, and, probably, ascend out of sight on their transit."

Rev. G. White, of England, a writer on birds, entertained the idea that swallows occasionally hybernated in that island, though he fails to give any authenticated facts to confirm it. His opinions are founded on statements like the following, which is quoted from his book: "one of my neighbors, an intelligent and observing man, informs me, [White,] that in the beginning of May, and about ten minutes before 8 o'clock in the evening, he discovered a great cluster of house-swallows, thirty, at least, perching on a willow that hung over a pond. His attention was first drawn by the twittering of these birds which sat motionless in a row on the bough, with their heads all one way, and, by their weight, pressing down the twig, so that it nearly touched the water. In this situation he watched them till he could see no longer. Repeated accounts of this sort, spring and fall," says White, "induce us greatly to suspect," [mark his words, *induce us to suspect*,] "that house-swallows have some strong attachment to water, independent of the matter of food; and though they may not retire into that element, yet they *may* conceal themselves in the banks of pools and rivers during the uncomfortable months of winter." This is the kind of testimony that hybernation and torpidity rest upon.

Spallanzani says very decidedly, that swallows retire under water at the time of their disappearance, but acknowledges that he never observed it himself. He performed a variety of experiments to resolve the question, whether cold would have the effect of producing torpidity, by confining swallows in different ways under snow and ice, and in an ice-house. The result was death, and the conclusion, that the species experimented with, does not become torpid.

It hardly seems necessary to multiply testimony further on the hybernation and torpidity of swallows. Much more might be presented of this mythical and hypothetical kind; none of it is positive in establishing the point at issue. It is opinion and tradition. To meet it, there is much positive testimony, going to prove that swallows are birds of passage—that they are migratory in their habits, like the other summer birds. The articles already published on this subject, have fully confirmed it in the United States. The reader will recall Audubon's observations, the result of living in the northern, middle and southern parts of this country, with special reference to testing the fabulous tradition of the torpidity and hybernation of swallows. Similar observations have been made in England and other countries, with the same results that have crowned the investigations of Audubon.

Says De Witt Clinton, who thoroughly investigated this subject, "in almost all countries, the swallow is migratory." Herodotus excepts Egypt, and says that "swallows and kites never emigrate from the country through which the Nile passes; and the same has been said of Japan."

In Greece and Italy they make their first appearance at the vernal equinox; and are regarded as the harbingers and companions of spring, being identified with its beauties and delights. Horace, in his letter to his friend Mæcenas promises to quit his winter retirement, in due season.

——Te dulcis amice, reviset
Cum Zephyris, si concedes, et *hirundine prima.*

The swallows' time of coming governed the operations of husbandry. Hesiod, in his "Works and Days," in urging attention to the pruning of the vine, says:—

——"'Tis dangerous to delay,
Till with twit'ring the swallow breaks the day."

The arrival of the swallow was considered as an indication of spring by Virgil; and its evolutions were noticed as prognostics of the weather, as now in this country.

——Nunquam imprudentibus imber
Obsint * * * * * *
Aut *arguta* lacus circumvolitavit *Hirundo.*

The ancient writers mention the swallow as wintering in Africa. The Rhodians had a festival for whose celebration the boys brought swallows; the song sung on the occasion comes down in these words from the Greek:

He comes! he comes! who loves to bear
Soft sunny hours and seasons fair;
The swallow hither comes to rest
His sable wings and snowy breast.

Avienus, alluding to the same custom, says,

When the hard earth grows soft in early spring,
And on the roofs the noisy swallow sings.

Aristophanes says that among the Greeks, the coming of the crane pointed out the time of sowing; the arrival of the kite the time of sheep-shearing; and the advent of the swallow, the time to put on summer clothes.

Theophrastus, at ancient Athens, mentions in his "Floral Calendar" "the Orinthian winds blow and the swallow comes from the first to the twelfth of March; the kite and the nightingale appear between the eleventh and twenty-sixth of the same month; the cuckoo appears at the time young figs come out."

Thus, in ancient as in modern times, the swallows made their appearance at the time of other migratory birds, later than some and earlier than others; and in European countries as in the United States, first appearing in the more southern kingdoms and States, and progressing northward as the season advances, being everywhere regarded as the true heralders of spring and early summer. They everywhere hold a high rank in the estimation of man, who welcomes them to his rural home, where these swift-winged visitors seem to find delight in associating and dwelling near enlightened and Christian civilization.

AMERICAN POMOLOGICAL SOCIETY.—The Sixth Session of this Association was held at Rochester, N. Y., September 24, 25 and 26, 1856. There was a large attendance, and a free discussion upon

a great variety of fruits. The printed report contains the excellent Address of the President, the Hon. MARSHALL P. WILDER, in which are diagrams for a summer fruit room and ice house, then a list of officers elected for the ensuing year, the report of the Committee on the Downing Monument, containing an engraving of the monument, and giving the inscriptions in the panels, and then the Reports from the several States, and the discussions which ensued upon them.

This Society is accomplishing a good work—the skill which leads to such thorough examinations of fruits will purge our gardens, fields and forcing houses of unprofitable and worthless varieties, and replace them with those of a healthful and delicious character. This reformation is greatly needed, as a large portion of the fruit on most of our farms is of a second or third rate quality, so that when it is marketed the farmer gets only a quarter to a third of the money he ought to obtain for the same number of bushels or barrels.

The public has a common interest in this matter; it is not confined to the gardener or orchardist. Good fruits are essential to the health of all, to say nothing of them as economical parts of diet, and therefore, all should do something to encourage and promote the objects of this and similar associations. There are no men more zealous or self-sacrificing than many of those whose names we see attached to the rolls of this society, some of whom have long been distinguished for their untiring efforts to introduce throughout our land the choicest fruits and flowers, and spread the blessings of Pomona around the habitations of the children of men. If these efforts are sustained, fruits of excellent quality will soon become cheap and accessible to all.

For the New England Farmer.

STATE OF MAINE POTATOES.

MR. EDITOR:—It is an old but trite saying that all is not gold that glitters, and with equal justness I may say, so far as my experience goes, that all are not potatoes that are "cracked up" to be. Let me explain. Nearly a year ago, a good deal was said in the papers, and more by advertisements, in praise of the potato going by the above name. I purchased a few, and had them tested from the table. They were fair, not more than middling as to their eating qualities, &c. I stated my opinion to the gentleman of whom I purchased them, and was told they must be first-rate, as "every body" told him so; and besides, though, they had been exposed to the light, air, &c., and had been several times packed and repacked in their sale. As they were a very handsome looking potato, had the reputation of being free from the rot, when planting time came, I concluded to give them a trial. I went to Boston, and purchased at the Quincy Hall seed store a barrel of the State of Maines. I have no doubt of their being the genuine article. The piece of land planted measures fifty-five rods. It was well plowed and thoroughly manured; the latter taken from my barn cellar, and composed of the droppings of the horse, cow, pigs, hens, sink and coal ashes, &c. The crop was well taken care of. They were dug at the proper time. A month before being dug, the tops or vines had been dead. The amount was thirty bushels. Not over three bushels of saleable potatoes, as to size; the larger share of them being under the size of a hen's egg, down to a pea. As for their eating qualities, they do not begin with those I purchased. They are salvey, and nearly all of them are smutty. I do not know how better to express it. It is not rot, but it gives them a dirty, unwholesome appearance. We have discarded them altogether from the table, and my wife says that she don't believe they are fit for a hog to eat, and in this I most heartily join. If any one doubts this statement, I will most cheerfully send them a mess, "at their expense as to postage." If there are others whose experience corresponds with mine, either better or worse, I hope they will do the State of Maine justice, which is the only desire of NORFOLK.

February, 1857.

LEGISLATIVE AGRICULTURAL MEETING.

[REPORTED FOR THE FARMER BY H. E. ROCKWELL.]

The Legislative Agricultural Society held its *Tenth* meeting Tuesday evening.

GENERAL NEWHALL,* of Lynnfield, was introduced by the President as the Chairman of the evening. He expressed his pleasure at the opportunity of meeting the members of this society, convened for the consideration of agricultural topics, and especially the one which was to be the subject of discussion this evening. He stated that it was expected that His Excellency, Gov. Gardner, would preside, but a severe domestic affliction had fallen upon him, and rendered it inconsistent for him to be present. General Newhall then referred to the great change that have taken place within his own recollection, in the science of agriculture. It now lies at the foundation of our prosperity as a people. Though commerce is regarded by many as of the first importance, he was of the opinion that more of value is annually expended for fertilizers to be put upon the soil, than is expended in the commerce of the country.

The subject for consideration was then announced to be "*Fruits and Fruit Trees.*"

Mr. W. J. BUCKMINSTER, of the *Ploughman*, had much to say on the subject. He had seen, within two days past, calls on the people of the commonwealth to increase the number of fruit trees. He had seen such calls in papers in Essex County, and in those of the West. Our latitude is as good as any other for the production of fruit—of apples, especially; and those raised in Massachusetts and Maine are better than those raised at the West. To be sure, they raise large apples, but there is a solidity in ours which does not exist in apples raised South and West. Fruits, both large and small, please at least three of our senses,

the sight, taste and smell; they are important auxiliaries as promoters of health. Many objections are made to setting out trees. Most are not willing to wait for the growth of trees; such persons should set out more small fruits. He had made some experiments with currants, blackberries, of which he had three kinds, raspberries, thimbleberries, and other small fruits. With proper care all these may be profitably cultivated. A new kind of thornless gooseberries was also spoken of as worthy of attention. By setting out slips of these fruits, a return may be obtained in a year, if the ground is stirred around the plants, and they cultivated just like corn. It is not merely for profit or health that these frusts should be cultivated, but the happiness and comfort of homes are greatly promoted by the cultivation of fruit. The advantages of cultivating grapes for wine, and of saving wild grapes for the same purpose, were spoken of, and the care and culture of such fruits. He stated that Mr. Page, of North Market Street, Boston, made 4000 gallons of wine from wild grapes, last year, and found a ready sale for it. He wants to buy them this year, and will pay two cents per pound for them.

Mr. LOTHROP spoke of the time of transplanting of trees. From his experience he had found that the spring was the best time. Some may live if planted in autumn; but to most, it is certain death to plant them then. He advanced the idea that they die when planted in autumn because of the want of vital heat in winter. He understood that the temperature of trees never fell below 40° in winter, and never rose above 70° in summer. Great care should be taken in applying manurer to trees when they are planted. He considered common barn-yard manure, with bone-dust, the best. He spoke of a wash which he thought very useful. It was composed of soap-stone dust, with lime and soap-suds; this makes a smooth coating on which lichens will not grow. We want more kinds of apples for eating in the spring. He called attention to the apple called the Northern Spy, and desired to know what the cultivators of fruit trees thought of that apple; the best he had ever seen were raised by Mr. Tudor, of Nahant. He thought winter pears were an unnatural fruit; and he did not consider them generally valuable.

Mr. WETHERELL said the best time for planting was held to be by many cultivators in the autumn, and they had had long experience, but he did not so regard it himself. The first thing to be regarded was the acquisition of *good, thrifty* trees. Those who buy of fruit tree pedlers may be quite sure to get poor trees. He thought soap suds put on with a brush or cloth, the best application as a wash. He was decidedly opposed to putting on any thing like a paint, or like the wash recommended by Mr. LOTHROP. Whatever wash is used, no coating should be left on trees. He did not wonder that lichens could not grow on such a paint as was described. As to apples and pears running out by being grafted for many years, he did think that would ever happen when the scions were grafted in thrifty young trees. He was satisfied that the Northern Spy was not, and could not become a profitable fruit in Massachusetts, but in Western New York, where it originated, it is a splendid fruit. In reference to setting out trees for fruit, he said that in California, apples and pears were both raised from the seed in four years. One gentleman in the State of New York set out a young orchard in 1848, and in 1854 he gathered from it 120 bushels; and two of the Baldwin trees produced three bushels each. From statistics respecting grape culture and wine making, it was shown that in 1840, there were 124,734 gallons of wine made, and in 1850, 221,249 gallons; but in 1853, the product had increased to a value of $2,000,000. Mr. Buchanan, of Cincinnati, for fifteen years cultivated different kinds of foreign grapes to test them, and after spending $120,000 in that way, he became satisfied that the Isabella and Catawba were the best grape for wine, and within the last fifteen years he had made $7,000,000 worth of wine. In closing, Mr. W. related an interesting case of a person in Germany, who obtained permission of a town to set out fruit trees on the wsste land by the road-side for twenty years. He was making it profitable to himself, and showing that great good to the community might result from such a practice everywhere. The trees were not robbed by the boys.

Mr. HYDE, of Newton, had found by experience, that spring was the best time for planting fruit. All stone fruits are very liable to be winter killed when planted in the fall. Apple and pear trees may be set in dry land in the autumn, but spring is better. He thought that the profit of fruit growing was an important question. He really doubted whether apple growing, near Boston, where the land is so valuable for raising garden vegetables, was profitable. He could not agree that any paint-like substance for a wash was good for trees. He had used a weak solution of potash and water. Half a pound to a pail full of water is sufficient. As to grapes, he believed we might have good native varieties that would ripen. The Rebecca grape that originated on the Hudson river, and is a white grape, is likely to be a good variety. The Diana is really a very fine grape. It is not a large berry. Then the Concord is coming into use. He preferred some other grape to eat. The Rebecca, the Delaware and the Union Village and other native grapes are worthy of trial. Grapes should be grown more extensively. The Isabella grape has been sold for a dollar a pound, and the supply was not near enough for the demand. The Northern Spy apple requires from ten to fourteen years to come to bearing from the seed, and when grafted, it requires seven years

where the Baldwin will bear in four. He did not believe the Porter and other apples were deteriorating when properly cultivated; nor are the Bartlett, and other pears deteriorating. He was in favor of manuring trees, but not with guano, nor any strong manure. No manure that ferments should be used. Ashes, composted with meadow mud, or chip manure, may be mixed with the earth near the roots; but no strong manure should ever be placed near the roots unless it is designed to kill them.

Mr. DODGE, of Sutton, did not believe any wash but water could be safely used. To cultivate the ground thoroughly was the best way. When seven hundred bushels of carrots can be raised from an acre, then it is pretty sure that trees can be put out with profit, and not till then. He had tried a great many experiments, but farmers cannot afford generally to do much in that way. Farmers better plant no more trees than they can take good care of. He earnestly cautioned against any wash. He would manure the trees at a distance from the body, and would keep his orchard in cultivation. Where calves rub against young trees, they seem to poison them with the oil that seems to be rubbed from them. The trees turn red and rough where they rub against them, and small trees will cease to grow, and finally die. It is of no use to set out trees on poor land, or where cattle may rub against them. Four or five varieties of apples, and the trees well taken care of, will be better for farmers than many kinds neglected.

SIMON BROWN, of Concord, said the question is often asked whether we are not going too far in raising fruits, especially apples. He referred to a recent visit to a farm about eighteen miles from Boston, and while spending some time in that vicinity several orchards were pointed out, that stood in grass ground, and were rubbed against by cattle, and produced no fruit. One-quarter part of the trees planted will never produce any thing. Many have a fancy to plant trees, but the novelty of the thing wears off, then trees are neglected and die, or are good for nothing. A few years ago, he bought a piece of land having fifty old trees on it; and he scraped them, and pruned them, and cultivated the land around them, and they are now bearing well. An old tree, even if it has only a shell, three inches thick, can be made to bear. Spare the old trees. Many prune trees too much. We neglect it too long, and then prune too much. We prune, too, at the wrong time of the year. The custom is to prune in March or April, because the wood is cut, and there is little else to do. The moment an incision is made at that season, the sap starts and runs over, and often leaves black spots upon the trees as long as they live. If pruned in June the sap is returning, and the growth of the tree soon heals the wound. Another great error is, that the farmer does not realize as much as he ought, after he has raised fruit. Two of his neighbors had good crops of Baldwins; the crop of one averaged twice as much as the other by the barrel. One scoured his barrels and sorted the apples into three grades. The other was careless in preparing his apples for market and had them all mixed together. If a farmer means to realize all he can, he must do as the merchant does, assort his fruits and his productions equally, and bring them to market in a neat manner. All should cultivate well, even the small pieces of land. The city is the best place to raise grapes. The little front yard is the very place to raise grapes. In the city of Brooklyn, more grapes are raised than in Boston. There, every sunny exposure is filled with vines trained up to the walls. When an orchard is to be planted, let the farmer select a few well known varieties, and avoid the expensive ones. When trees are grafted—old trees—let all the scions put into one tree be of the same kind. It is a great trouble to assort different varieties from the same tree for market. With reference to setting out trees by the road-side, Mr. Brown referred to his own experience. Many years ago, he set out cherry trees on each side of the road near his residence. His neighbors laughed at the idea, and inquired why he did not set out elms. But he was better pleased with a tree that would furnish both shade and fruit. Now, those trees bear abundantly; they are not molested by the boys, for they belong to them when they are ripe, and so they allow them to grow, and when the boys have what they want, the birds have the rest.

Mr. FITCH, of Sheffield, spoke briefly of his experience in fruit raising. He had found ashes an excellent manure for trees.

The subject for the discussion of the next meeting was announced to be "Feeding of cows, with reference to the production of milk; and feeding and breeding swine."

For the New England Farmer.

WHAT SHALL THE FARMERS' DAUGHTERS DO?

MR. EDITOR:—Your columns seem to be open to the remarks of your many readers, and not a few of them take advantage of the opportunity thus offered, of making known their various opinions upon agricultural, as well as some other subjects, and of learning those of others upon the same.

The farmers have written upon the advantages and disadvantages of large farms and small farms, of good farms and poor farms, the best manner of raising neat stock, horses, sheep, hogs and poultry; and the ways in which a man commencing the world without a dollar, can in a few years acquire a good farm well stocked, a good home, with all the comforts and many of the luxuries of life, have been ingeniously set forth, much to the encouragement, probably, of many who were on the point of "giving up the farm," and betaking themselves to some more genteel or lucrative business.

Pleasures and enjoyments for leisure hours, books, papers, lyceum lectures, and debating clubs, for the long winter evenings, and the most approved methods of intellectual culture, have been recommended; and "farmers' sons" have discussed the subject whether they had better remain at home on the farm, or seek a situation in the city, where they can enjoy privileges not found in rural districts. And even farmers' wives have made some useful suggestions in your valuable paper.

But it occurs to me that households are rare in which the farmer, his wife and sons, comprise the whole family. It is true that compared with the sons, the daughters are considered by the lords of the soil as quite insignificant beings. Now, Mr. Editor, *I* (being one of the latter class) do not expect to convince you or your readers that I am of equal importance in the world as my brothers; or that my claims to consideration and interest should be mentioned the same day as theirs. But having been a reader of the *Farmer* sometime, I have often hoped and vainly looked for some article indicating the best course for the class of which I am a representative to pursue.

There is a large family of us, some already are come to years of maturity; we have many wants to supply, and the respected head of our family has so many calls for his surplus funds that there is next to nothing left for the girls. Now shall we stay at home and be content with the limited means and advantages afforded us, or shall we leave the homes of our childhood, tear ourselves away from brothers and sisters, and from parents, when we most need their council? Shall we stick to the farm-house kitchen, and assist in lightening the task of our mother, or shall we leave her to toil alone, while we seek from home some of the few employments which are open to females?

Now, sir, if you or some of your able correspondents will advise us; and also among the few kinds of employment, which is to be recommended, or least objectionable, you will greatly oblige

A FARMER'S DAUGHTER.

Ipswich, March 9, 1857.

For the New England Farmer.

AGRICULTURAL REPORTS.

MR. EDITOR:—As I am a friend to equal privileges, (and I trust you are,) I would like to make a few suggestions and inquiries as to our State Agricultural Reports. I suppose we all help pay for them, and if that be so, I think we are all entitled to our share of them. Let them be distributed among the towns in proportion to their number, and go to make up a library, that would be free to all. I would say, also, the same of the Patent Office Reports. The practice of sending them to individuals, is, I think, wrong, for the most of them lay idle on some rich man's centre table, that is able to pay for his books, and by so doing the working farmer seldom sees one.

Perhaps you may say they would lend them; no doubt some would, but I do not feel like borrowing what I help pay for, I am well aware that some will say that it is not to be expected all can share alike, and neither do I, but when it *can* be done I hope to see no objections. You say you are very much indebted to books for your knowledge of farming. Would it not be better for Town Agricultural Societies to expend a part of their funds in books for a library, so that when we meet winter evenings, to talk about farming, we could exchange books, and all that are disposed, would have an equal chance for them? I think our town Agricultural Societies are much better calculated to do good than our State or County Societies. Every town ought to have one, and a good library, and then they would be to agriculture what our common schools are to other seminaries of learning.

Leominster, March, 1857. JUSTICE.

For the New England Farmer.

NEW WAY OF PLANTING CORN—BORERS.

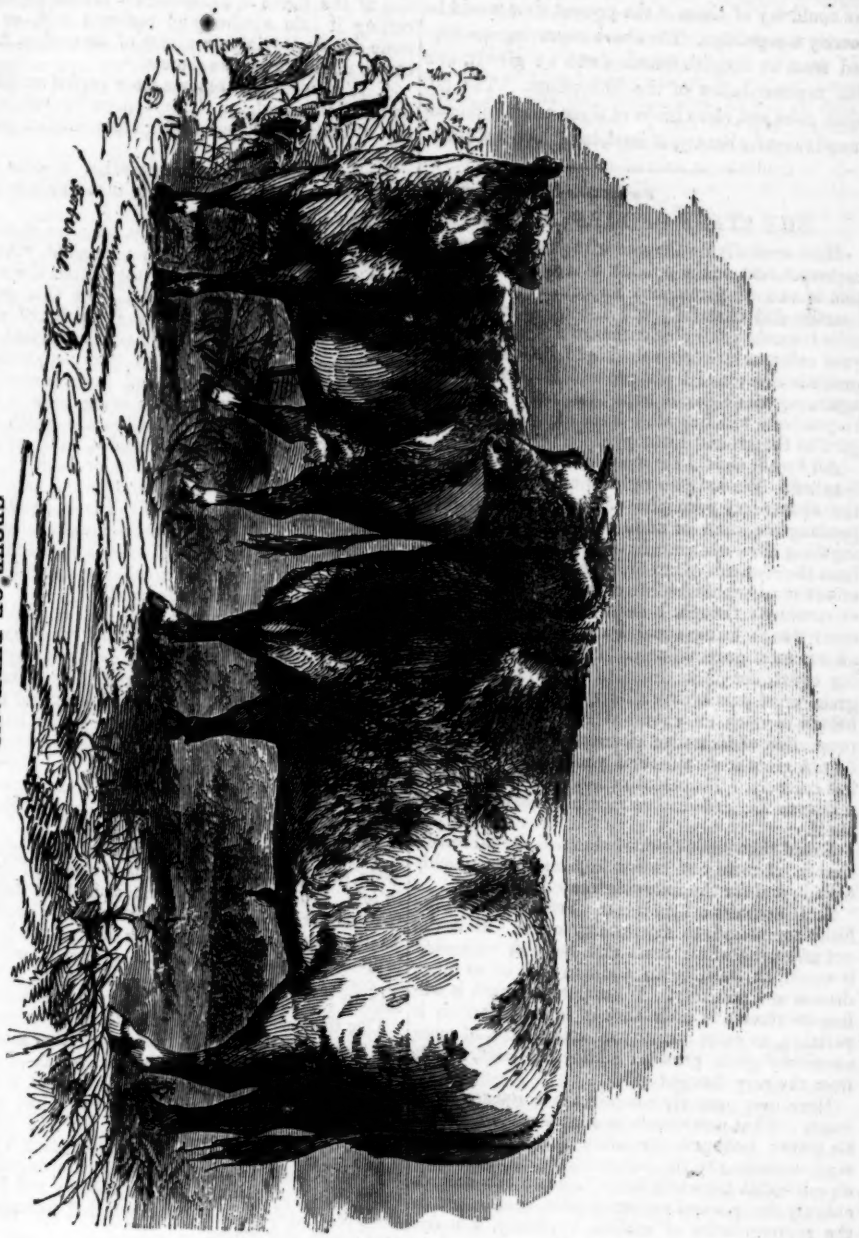
MESSRS. EDITORS:—Having travelled somewhat extensively in this and some of the neighboring States, in disseminating agricultural literature, with an eye open to all the new ideas and improvements that have been introduced in those localities, I flattered myself that there was nothing new to be seen or heard in regard to the cultivation of Indian corn; but, on calling upon Mr. REUBEN LOUD, of East Abington, a few days since, I found that I had reckoned without my host, as he had tried the following described experiment, with complete success:

The land upon which the experiment was made was a lowish piece of greensward, such as in most parts of New England is infested with yellow wire-worms, which, I understood some of Mr. Loud's neighbors to say, had always been the case with this field, sometimes the worms destroying nearly the whole crop. Beginning upon one side, a furrow was turned fieldwards, a foot or more in width, which of course covered the unplowed land to the same extent. A furrow was then turned to the back of this, leaving six or eight inches in width of grass uncovered, on which the manure was put in hills about three feet apart. The corn can be put above or below the manure. The manure was covered with dirt from the furrows.

In commencing for another row a strip of about fifteen inches in width was left untouched until the hoeing time, when it was split in two, by the horse plow, one-half being used to bank up each side, with grass-side down. The corn was hoed but once, and three-fourths of an acre produced sixty-five bushels of good corn in the ear. The hills may be made much nearer, or the corn may be planted in drills, and the manure put upon the top. No inconvenience was suffered from worms, except where the corn was planted on the broken sward, when it was found to have been invariably injured by them. There was a saving in labor of a good share of the plowing, all the harrowing and furrowing out, and more than half the hoeing; but it might be advisable to hoe more than once. A Michigan plow would be the best for the above purpose.

Mr. JOHN ORCUTT, of South Weymouth, informs me that he has effectually prevented the ravages of the borer in young trees of all kinds, by tying a piece of cotton cloth six inches in width, around the bottom of the tree, about the first of June. Cost, about one cent per tree. A number of people in West Abington, neighbors of Mr. Orcutt, corroborated the above, by saying that they had profited much by following Mr. O.'s example.

Abington, March, 1857. MOSES M. FISKE.



GROUP OF DURHAMS.

GROUP OF DURHAMS.

The peculiar characteristics of this breed of cattle are so well known to our readers, and have been so often described in our columns, that any thing we could say of them at the present time would be merely a repetition. The above engraving was copied from an English drawing, and we give it, as a fair representation of the Short-horn. The fat, sleek sides and clean limbs of these cattle will commend them for beauty, at least, to all lovers of stock.

For the New England Farmer.

THE STAFF OF LIFE, AGAIN.

Most cordially do I agree with your Springfield correspondent, in the opinion that the bread question is one of paramount importance; and most heartily and cheerfully will I contribute my own mite towards a full elucidation of the subject. But your columns are too valuable to be occupied by preliminaries; and I will proceed at once to state, again, my views, in the hope that your various correspondents will hereafter have no doubt with regard to the ground I occupy.

All bread should be made of whole meal, as it is called. We have no right to add to or diminish the elementary principles of our grain—as in separating the bran or adding molasses or yeast or anything else—than we have to add to or detract from the elements of our moral sustenance. Whether our meal should be fine or coarse is quite another question; though, I must say, in passing, that other things being equal, I should prefer to have all our meal ground finely. I say other things being equal; for if, in order to have fine meal, the grain must pass between heavy mill-stones and be heated to such an extent as to rob it of a large proportion of its native richness, then I would say do not grind it at all, or if you grind it, let it be but coarsely. The truth is, I prefer to have the millstone for teeth rather than have no mastication at all.

Bread thus made from whole meal should consist simply of meal and water in thin cakes, quickly baked; and for the following reasons.

1. It *excludes all filthiness.* Yeast or leaven is a filthy compound, to say nothing worse. If it did not affect the whole mass with its own "disease," it would, at least, be an addition to it of so much disease and putridity. What pure stomach is willing to receive in each slice of bread of which it partakes, an extra quantity of animalculæ, of comparatively giant growth? Mine, at least, recoils from the very thought of it.

Here may properly come in the scripture argument. What now stands in our translation, "A little leaven leaveneth the whole lump," should be read, according to the best scholars, "A little leaven *corrupteth* the whole lump." With this accords entirely the general scriptural idea that leaven is the representative of malice, hypocrisy, &c. &c. That fermentation is the first step on the road to putrefaction, will not, as I suppose, be denied; and hence raised bread is decaying bread.

2. It *wastes no nutriment.* Raised bread is of course fermented bread; but fermentation cannot take place without changing a part of the nutritious matter of its substance into alcohol and carbonic acid. The former is certainly lost, since it is dispelled by the heat of the oven; and the latter can hardly be of any value.

3. Thus made *it is sweeter.* That this is the case might be inferred from the foregoing, no less than from experience. If fermentation uses up a portion of the farina and saccharine matter by converting it into alcohol and carbonic acid, or as some say, destroying a measure of its vitality, it of course diminishes its sweetness.

4. It requires and secures *more perfect mastication and insalivation.* This it does by retaining that attraction of cohesion which fermentation partly removes.

I might add to these, many other reasons for preferring unfermented bread to that which is fermented; but is it necessary?

We are told by "A. E. P.," that after making trial of the kind of bread I recommend, "Abraham's wife's fine cakes, with the butter, the milk and the veal," were preferred. Does this prove the superiority of the latter in any point of view whatever? If the "fine cakes" have any advantage, it must be on the score of gustatory enjoyment. Yet those who have fairly tried both, (excepting A. E. P.) assure us that after using them a few times, the unfermented cakes become much the most sapid and agreeable. Besides, habit or custom is very powerful. "Custom or habit," it has been said, is "second nature; and second nature is stronger than first nature." If this is so—and who will doubt it—shall we resolve the usual preference of our citizens for fermented cakes and bread into superiority in point of real excellence, or shall it be referred to the force of early habit?

In regard to the contradiction—real or supposed, in your paper of Jan. 10,—to which your correspondent has called attention, I can only say that if it is justly chargeable on myself, it must be the result of pure accident. If it was I who said there is no kind of vegetable food more palatable, healthy and nutritious than good bread made of fermented wheat flour, I should have said *meal* instead of *flour.* But as I have not a file of your paper at hand, I do not know whether I am the perpetrator of the deed or not.

To flour, *i. e.*, the finer parts of the ground grain, as separated from the coarser parts, I object, *in toto.* No meal of any sort should be bolted. Give us the whole meal, or nothing. Of course, I do not mean to encourage the use of what may properly be called the husks of grain, whether of corn, oats, barley or buckwheat. But I have said all this in other words, and need not repeat.

One drawback upon the excellency of unfermented wafers or "strips" of bread—whether made of wheat, rye, oats, barley, corn or buckwheat—I have always conceded, and still do. It is that it costs rather more labor, and will not last as long; or, in other words, makes more work for the housekeeper. But, at the risk of repeating, still, I must say that it costs less than the usual paraphernalia of cakes which are found on our tables; and I pity those who having these cakes which I recommend, ever desire any others.

If this, added to former explanations, does not satisfy the readers and correspondents of the *Farmer*—and if the more extended explanations in my late work, "The Laws of Health," should still leave difficulties in their minds,—let them come at once to No. 20 Lagrange Place, Boston, and I will show them the theory in practice. WM. A. ALCOTT.

For the New England Farmer.

A RASCALLY IMPOSITION.

MR. EDITOR:—About three years since I bought a piece of "worn-out land," rather light and dry, but easy of cultivation, and making as surely a quick and ample return, for the skilful application of manures and labor expended upon it, as any land. Last year was the third that I had been endeavoring, with the aid of the weekly *Farmer*, Johnston's Agricultural Chemistry, the American Muck Book by Browne, and some other works of less note, to improve the condition of the soil, and render it more productive. I had succeeded beyond my first anticipations, though not fully satisfied with what I had attained unto, for you know, that in the human breast, success begets hope, and a desire for greater attainments, in any worthy pursuit. On the 26th of August last, as I was cutting India wheat by the road side, on the poorest part of the above named land, and revolving in my mind the ways of proceeding to enrich this barren part, and like Ortugrul, wishing the golden stream quick and violent, a man, or perhaps I should say gentleman, for so he appeared, came along the road with a respectable carriage and horse, and seeing the circumstances in which I was at work, hitched his horse to the fence, and came over to me. After some little preliminaries he introduced his business, by saying that he was the first partner in the firm of Whitney, Shaw, Lent & Howes, wholesale dealers in flour, &c., 111 Main Street, Eastport, Maine, and 16 Long Wharf, Boston, and that he was out taking orders for goods, and also that the company were proprietors of Homer P. Vanamburg's Patent for Tafeu, for New England, and that he, with his other business, was making agents, for making and vending the Tafeu, or selling the proprietorship of small sections, where he could. He told me of some sections that, he said, he had sold, and left some of his advertisments with me, some of which I send you with this, for your own "edification," and I have quite a bundle left for my own. Well, after discoursing sometime on the invaluable virtues, the cheapness and ease with which it could be made, on every man's farm, the only foreign ingredients needed being of small cost in market and light of transportation, &c., &c., I ventured to take the agency for Lamoille County, as *I* thought, on very flattering terms, the whole particulars of which I cannot now enter into. Suffice it to say, that I almost thought that I had got the "quick and violent" "golden stream" in my possession, and could soon have it running right on to the spot where I then stood, and which so much needs it, and which, by the way, was the best spot for him to sell his wares on. All he asked of me, was to pay one-half the expense of advertising for the county, the whole of which he thought would be about eighteen dollars, the half of which he said he would take my note for, in thirty days, if not convenient to pay it then. But as I go in for paying little things as I go along, especially when I am getting a good deal for the money, I poked along the nine dollars, and took his receipt for the same, and also a deed for the agency of the county, and to be *sure of no humbug*, I also took a written obligation of him, that, if I should be dissatisfied with the thing, at the end of the first year, he will pay me back the nine dollars, and also a fair compensation for any trouble or expense that I may be at during the year, in consequence of the operation. I have got all these papers duly signed, and executed, and in full force as ever. He was also to send me in ten days, or less, all the books for directions, and all the blank books and blanks for doing a *large* business for the year, free of charge.

Well, now comes the sticking point; but when a man is fairly "treed," he may as well own up as any other way, and more, I think he will get down sooner, and with less bruises than he will to stick to it that he is not up. I own up; now for the getting down. I have not heard from Mr. Whitney, received books, or blanks, or anything of the sort in relation to the matter, since the memorable 26th of August last, nor do I want to, for I had, in the works above alluded to, all that was absolutely necessary, in order to do a fair and remunerative business at reclaiming the worn-out land alluded to above, and if I had had my eye-teeth cut I should have let Homer P. Vanamburg's patent Tafeu alone. But as they were not, it was very necessary they should be, and I think nine dollars a low price for doing it, and if Mr. Whitney would call on me again I would thank him kindly, and *possibly* might make him some present more.

You will see, Mr. Editor, by the hand bills I herewith send you, that there may be others in the same predicament with me. If there are, they are probably feeling some as I did about it, for awhile, and our case must have been very similar to that of the "green ones" who went in singly to see (for a sixpence) the animal that looked like a horse, whose head was where the tail should be. When they come to find the curious animal to be an old mare backed up to the rack, each sneaked off to let the others find out for themselves. Now I am green, and I know it, and am willing to confess it, and would "forsake" it, if I could, but the prospect is very poor that I shall ever get far from it. If there are no other ones in this matter with me, then I shall have to own that I am the veriest Johnny raw, in all New England. If there are others, up the same "saplin," do let me know it, some way, either through the *Farmer* or some other way, and if we can do anything to stop this itching after patent manures, to the neglect of the, generally, ample means we have on our own farms, we shall do a great favor to the public generally, and get back our nine dollars with a profit.

Johnson, Vt., Feb., 1857. C. WHITING.

For the New England Farmer.

THE HORN AIL—OBSTRUCTED MILK.

MR. EDITOR:—I have seen in the *Farmer* prescriptions for a cure of the horn ail in cattle; also an inquiry as to the cause, and a cure, for a cow whose teat had become very hard to milk. When reading them, I felt a strong inclination to give you the remedy I have always used in such cases, with entire success, and which is very simple and easy of application.

For the horn ail, (which may always be known by the horn becoming cold, with entire loss of appetite,) I take one tablespoon full of saltpetre, (about one ounce,) one of ground black pepper, and one of common soot; when well pulverized and mixed, divide into three doses, giving one per day. By placing it on the root of the tongue, it may be given with a very little trouble; at the same time,

put on one spoonful of spirits of turpentine in the hollow between the horns. Feed lightly. Two doses is generally sufficient to effect a cure in one or two days.

The difficulty in the teat, I apprehend, is occasioned by the milk duct becoming dry and closing up; all that is necessary to effect a cure is to insert a large-sized knitting needle into the hole of the teat, and it will at once give the milk as freely as ever. J. L.

Northboro', March, 1857.

COMPOSITION OF WHEAT, FLOUR, AND BREAD.

CHEMICAL.—*Jan.* 19.—Dr. W. A. Miller, President, in the chair.—A paper was read, by Mr. Lawes and Dr. Gilbert, "On the Composition of Wheat, Flour, and Bread." The authors described the results of an extended course of experiments, in which the wheat was traced throughout from the field to the bakery. The crops under examination were grown each successive year from 1845 to 1854 inclusive. In 1846, which year yielded altogether the most fully matured crops, the proportion of nitrogen was lowest, and in 1853, when the crops were altogether poorest, the proportion of nitrogen was highest. The characters of a highly matured crop are, low proportion of water, low proportion of ash, and low proportion of nitrogen. In reference to the effect of manuring, it appeared that in crops manured with both nitrogenized and mineral matters, there was the best produce and the greatest reduction in the proportion of nitrogen. The character of the ash of wheat, though subject to considerable variations in poor crops, was found in well-matured produce to have great fixity of composition. The character of the ash, moreover, was very independent of the nature of the manure, but it was observed that the proportion of lime increased with the high maturation of the crop. In reference to the products of the mill, the bran was found to yield 10 times as much ash, and 1½ times as much nitrogen, as did the household flour. The authors estimated the amount of water in bread at from 36 to 38 per cent., and considered that 100 lbs. of flour yielded on the average 138 lbs. of bread. Their experiments showed that the loss of dry matter in fermentation is extremely small, certainly less than 1 per cent. They considered that the average amount of nitrogen in bread was ½ per cent. It is well known that millers and bakers consider the excellence of flour to be in proportion to the amount of starch. Contrary to the opinion of Liebig, and of most chemical physiologists, the authors maintained that the bakers' standard is the correct one; or at any rate that the least nitrogenized bread contains an ample sufficiency of nitrogen, and that the great demand for food is for its respiratory or carboniferous constituents. From a large number of analyses of flour, in which the gluten was separated mechanically, it appeared that, both in Europe and America, in proceeding from the north to the south, the proportion of gluten gradually increased, and, consequently, according to the authors' criterion of high maturation, the most matured crops were grown in the coldest latitudes. Dr. Marcet was indisposed to admit the authors' conclusions in reference to the low value of the nitrogenized constituents, and referred to some experiments showing, that the more highly nitrogenized is the character of the food, the less is the quantity of food required. —*London Athenæum.*

UNITED STATES AGRICULTURAL SOCIETY.

Great National Trial of MACHINERY and IMPLEMENTS of every description pertaining to AGRICULTURE, and Household Manufactures, at the FIFTH ANNUAL FAIR, to be held at Louisville, Ky., during the fall of 1857.

The undersigned, a Committee of the United States Agricultural Society, appointed at the fifth annual meeting held at the Smithsonian Institution, in the city of Washington, on the 14th day of January, 1857, "to make all the necessary arrangements for a *National trial in the field of Agricultural Implements and Machinery*," respectfully invite the inventors and manufacturers of all such articles, both in the United States and foreign countries, to participate in a public trial to be made at the society's annual exhibition, to be held at Louisville, Kentucky, during the fall of 1857.

This new arrangement for the exhibition of agricultural implements and machinery of all kinds in actual operation, results from a conviction on the part of the society that no just awards can be made except upon a practical working trial before competent judges; and the fullest opportunity will be afforded to test the comparative merits of the various machines that may be entered as competitors for the awards, both as regards land for field implements, and steam power for stationary machinery.

A separate trial of reapers and mowers will be made at the appropriate season, special arrangements for which as to time, place, &c., will be announced at an early date.

It is intended that these exhibitions shall be on the most extensive scale, for the purpose of testing the working qualities of these important implements more thoroughly than has yet been done on any previous occasion either in the United States or in Europe.

All articles from foreign countries intended for exhibition may be consigned to the "Agent of the U. S. Agricultural Society, Louisville, Ky.," by whom they will be received and stored free of charge.

This brief announcement of the proposed trial is made at this early date to afford the most ample time for the preparation and transmission of machinery. A circular containing full particulars as to regulations will be issued as soon as practicable, and, with the premium list, will be forwarded to persons who may apply to the Secretary of the Committee, Henry S. Olcott, *American Institute*, N. Y., where all business letters should be addressed.

To enable the society to make arrangements on a sufficiently liberal scale, it is absolutely necessary that the Committee should know what articles will be offered for competition; and they therefore request that all inventors or manufacturers who may be disposed to unite in the proposed trial will communicate their intentions to the Secretary at their earliest convenience.

TENCH TILGHMAN, Chairman, Oxford, Md.
JNO. D. LANG, Vassalboro', Me.
J. THOMPSON WARDER, Springfield, O.
GEO. E. WARING, Jun., Am. Institute, N. Y.
HENRY S. OLCOTT, Sec., W. C. Farm School, N. Y.

Committee on Implements and Machinery of U. S. Agricultural Society.

For the New England Farmer.

CULTURE OF ORCHARDS.

It is said in the *Farmer* of this date, March 21, 1857, in answer to the inquiry, "Will young trees do well set where there has been an orchard?"—that "a young orchard will grow well on the site of an old one, if you manure and move the soil well." If it was intended by this answer to imply that a young orchard will grow as well, where there has before been an orchard, as where there has not been—it states a doctrine not in accordance with the lessons I have learned for the last fifty-seven years.

When I was a boy, in the year 1800, my father purchased a farm that had been famous for its product of apples and cider. Many of the trees were then from thirty to eighty years old. One of his first efforts was, to grow a nursery of young trees, to have the means at home, for keeping his orchard in good condition. More than five hundred of the trees that started in this nursery are now growing on this farm—where they were set by my own hands. If anything was learned by this experiment, it was, that it is not judicious to set out trees where the soil has been exhausted of those elements which are essential to the productive growth of trees and fruits.

If you would have an orchard worth rearing—set your trees in positions favorable to their growth; such as by the side of high walls—in hollow places where there is a good depth of soil—by the gutter where the wash comes in from the highway—and other select places. It is much more important to have a tree thus set, than to have them straight in rows, just so many feet apart. I have known more apples to grow on four roods of land properly selected and properly cared for, year after year, for ten successive years—than on four acres of handsomely arranged trees with ten times the number.

A striking instance occurs to mind, on one of the largest farms in the county, where forty years since the proprietor, a man of means and enlarged views, determined to have an orchard that should surpass all others. For this purpose, he selected about twenty acres, and set out his trees in straight rows, forty feet apart—and spared no vigilance in digging about, fertilizing and training the same. For a few years they grew and looked beautiful, and were the admiration of all who saw them. Thus they progressed until the proprietor was summoned to depart, and his extended farm passed into the hands of his heirs-at-law. Anxious to carry out the views of their venerated sire, they kept the farm entire—and had it carried on to the halves. But what became of the beautiful orchard? As soon as the fostering care was withdrawn, the bodies of the trees became covered with moss—the grub of the cankerworm lodged about their roots; the limbs began to crumble and fall, and for several years more apples matured on a single acre of naturally planted trees in a neighboring pasture, than were found on the whole extent of this once splendid orchard. So much for

March 21, 1857. EXPERIENCE.

REMARKS.—We should not *select*, in preference to new land, the site of an old orchard to plant a new one upon; but if that site was preferable to other lands in surface, location, &c., we should have no hesitation in doing so, only give us plenty of barn-yard manure to apply to it. We know a field in the writer's own neighborhood where a luxuriant crop of rye has been raised, it is said, for more than fifty years in succession—we certainly have seen it a great many times from early boyhood. But rye grows there still, and probably would for a thousand years longer, under the same treatment which the land has heretofore received.

No doubt apple trees deprive the soil, in some measure, of the particular substances necessary to their growth; but if it has not been *exhausted* by them, as most of our old orchards have been exhausted by apples, grass, potatoes, beans, corn, and everything else that could be wrung from them, there is no difficulty in raising a new orchard upon the site of an old one.

Stir the ground deeply, and mingle the fertilizer freely and intimately with it, keep weeds or crops from feeding too largely upon it, and success will crown the efforts of any who plant a young orchard on an old site.

When a growth of oaks has been cut off, the soil is undoubtedly deprived, in a considerable degree, of the elements necessary to rear up another growth of the same plant, and as nature fertilizes her exhausted acres by a process rather slow, she introduces pines, birches, or some other tree which may find the elements suited to its growth. But we, not caring to wait for this process, fertilize by a shorter cut, and dump on twenty-five loads per acre of warm and quickening manures, that soon supply all the elements that any plant requires.

But our correspondent is a close observer, has had large experience, and his words are entitled to careful consideration.

For the New England Farmer.

LEGISLATIVE AGRICULTURAL MEETINGS.

FRIEND BROWN:—I thank you for the copy of the *Mark-Lane Express* for February 25, that came to hand this morning. If we could look attentively to the manner in which the farmers on the other side of the great pond do up their chores, it would take the stuffing out of some of our notions.

I listened attentively to the remarks of the distinguished gentleman who presided at the meeting. He never says anything trifling or small. There are few men of his years that possess better practical common sense than Governor Boutwell. Excepting *his* remarks, last evening, upon the comparative advantages of farming at the East with those at the West, I do not remember anything worthy of special note. Would it not be well for the committee who direct in these matters, to mark out a line of discussion to be followed by their legislative associates—and let the outsiders, here and there, interline such suggestions as their experience may dictate? These discussions are carried on mainly for laying the foundation of diffusing information in the journals of the day, each individ-

ual being held responsible for the facts he communicates, or the opinions he expresses. I say without hesitation, there is no part of your paper that interests me more than Mr. R.'s report of the farmers' discussion. I wish every village of farmers would have their own debating club; how could they better employ one evening in a week? And then let their intelligent secretary report the discoveries elicited for the columns of your journal.

March 18, 1857. A LOOKER ON.

For the New England Farmer.

ABOUT ORCHARDS.

The season is now at hand for planting orchards. Farmers need not be afraid that the market for good fruit will be overstocked, and delay setting out trees. The supply of fruit now seems enormous, but the demand more than keeps pace. Look at Boston, with its 150,000 inhabitants. Suppose each individual consumes an apple a day, how many barrels are annually required for this very moderate demand? About a hundred thousand barrels! Now Boston consumes but a portion of the produce marketed there. Every vessel carries away more or less to be used on the voyage. Then all the large places on the coast, North and South, rely on Boston market, more or less, for apples. Last spring, large lots of apples were sent from Concord to Wilmington, N. C. The best brought five dollars a barrel there. I understand that Mr. Simon Tuttle, of Acton, Mass., sells his Russets in the spring to go to New York. I have sold apples to go to Maine and Nova Scotia. The fact is, there is no such thing as glutting the market with good fruit. The breadth of country is not large where apples flourish best. Perhaps Massachusetts is as good a latitude as any for orchards. Why should there not be ten times the trees growing? Will any man say that in suitable locations, the apple tree is not profitable? It is true it sometimes partially fails. But so with other crops, from the potato, with its inexplicable rot, to the sugar cane at the South, killed by untimely frost. But taking one year with another, how can a farmer get a sum of money easier, than by selling his generous crop of apples? Let me give a single instance. Last fall, I sold at wholesale, apples from one tree—not the largest one in the orchard—to the amount of twenty-three dollars, hard cash. The tree has not had the value of one dollar put upon it for five years. Now deduct a reasonable sum for gathering, &c., a very neat profit is quite apparent.

Although hundreds of chapters have been written about tree-setting, and the necessary after culture, multitudes buy trees annually, and stick them into the ground only to die, or what is worse, to exist but for a few years. Now, Mr. Brown, you would pity your nursery friends, if you knew how they "have to take it" from some of their customers. I hope you will again advise, direct, counsel, urge, warn your inexperienced readers, not to pay away their money for trees unless they *know exactly what to do with them.* This paying a shilling for a tree, and then sticking it down in grass ground to be broused by unruly cattle, and holding the poor seller responsible for its continual thriftiness and abundant bearing, is too bad altogether.

Set out good trees in mellow earth, give them something to live upon, and continue *generous care,* and you will be well repaid for the labor.

Concord, April, 1857. W. D. B.

LEGISLATIVE AGRICULTURAL MEETING.

[REPORTED FOR THE FARMER BY H. E. ROCKWELL.]

The Legislative Agricultural Society held its *Eleventh* meeting, Tuesday evening, as usual. The topics for consideration were:—"*Feeding of cows with reference to the production of milk; and the feeding and breeding of swine.*"

Hon. J. W. PROCTOR, of Danvers, was called on by the President to preside, who, on taking the chair, said:—

Gentlemen, Farmers of the Legislature:—Since I entered this hall, I have been requested to preside at this meeting, without any expectation that I should be called on to do so. But wherever improvement of the operations on the farm is the subject, I do not feel at liberty to decline any service in my power. I am sensible that I am indebted to my long *service* for this distinction, rather than to my accumulated knowledge; for I hold it to be a distinction of the highest order to be thought worthy to preside, even for a single evening, at a meeting of the farmers of the Commonwealth. When I reflect that His Excellency, and other dignitaries of the State, have filled this position, I shrink, almost instinctively from the task; but when I see around me, as I do, gentlemen well experienced in all the operations of the farm, ready to lend a helping hand, I take courage for the task, knowing full well that "a faint heart never wins a fair lady."

The reports of your meetings, gentlemen, as they go abroad in the community, are received with much interest, and the statements made here are looked to as in the nature of authority. It ought to be so, since the gentlemen who participate in the discussions are gentlemen of the Legislature, selected from all parts of the State, from among the farmers to a great extent, and fairly representing that great and important branch of our interest and agriculture.

The subject especially assigned for this evening, I understand to be, the feeding of cows for milk and dairy purposes, and the rearing of swine. Unquestionably the dairy is one of the most important objects demanding the attention of the New England farmer. An important question is whether there is any special mode of feeding cows that will make dairies more profitable? As a general thing, the better cows are fed, the better will be their products. When young, I assisted in the management of a dairy—helping to milk the cows and churn the butter—under as good a teacher as my neighborhood produced, and I have always had a taste for good butter. The best product we used to get was from one to one and a half pounds of butter per day, during the season of milking, say from the first of June to the first of December; and the best feed of the cows was the natural grasses or

the pastures, with plenty of pure water. When these failed by reason of drought or any other cause, recourse was had to the corn-field, and the stalks were cut and greedily devoured by the cows. I have heard some say that corn fodder would not produce milk; but my old mother Pickering used to say that it was not possible that the sweet juice of Indian corn should not be useful for milk cows. We found it good for them.

The feeding of swine naturally follows the operations of the dairy, for much that is useful for little else may aid much in fattening swine. Swine are also very useful on a farm if rightly employed. Every swine raised on a farm will make more than his own value in manure, if you keep him well supplied with the material to work upon. There is a reciprocal action between what you do for a crop and for your swine; and there is no better way to make manure than by the aid of the hog.

Col. NEWHALL, of West Newbury, was called up by some appropriate and well deserved allusions to his experience and acquaintance with the subject for consideration. He thought some kinds of grasses were better than corn for producing milk; and he thought corn should be permitted to have considerable growth before it is fed. Cows for a dairy would do better not to be milked more than nine months in a year. He had had cows that gave milk three years in succession, and had calves annually. Much judgment should be exercised in selection of cows according to the purpose for which they are wanted. Those that give most milk are not generally best for butter. Indian meal he considered good feed for producing milk. Oil meal he did not think desirable as a constant food; feeding freely with meal will sometimes destroy cows. He had no doubt that many cows were good for butter and not for cheese; therefore it is important to consider whether a farmer wishes to make butter or cheese, or sell the milk. He had found that it required a gallon of milk to make a pound of cheese; and he could not make more than a pound of butter from two gallons of milk.

Mr. HOWARD, of the *Cultivator*, inquired of Mr. NEWHALL if he was satisfied as to what proportion the value of milk for cheese would diminish by taking off the cream.

Mr. NEWHALL said it would not diminish in proportion to the amount taken off for butter. The weight of the butter and cheese combined would be greater than that of cheese, if cheese only were made.

MR. FORBES, a member of the Board of Agriculture from Maine, being present, was invited to give his views. He said that five years ago, he went on to a farm of twenty-five acres, so poor that from the whole he could obtain only about six or seven tons of hay; now he cuts from thirty-five to forty tons. He plowed the land to the depth of twelve inches, six inches lower than it was ever stirred before. He was now making an experiment, by feeding a cow with low-land grass and meal for one week, with clover and meal for the next, and with herds grass and meal the next; and after keeping a correct account of the results, he thought he could decide the relative value of the different kinds of food, which result he should publish. So far as the experiment had now gone, he found the clover much better than the lowland grass. Mr. Forbes urged the importance of farmers keeping accurate accounts of everything connected with the operations of the farm. Who can tell the most economical feed for stock for different purposes? He had not been able to find out the most economical kind of feed for swine. One of his neighbors, being asked what he thought would be the expense of keeping pigs when eight weeks old, said he supposed it would be about twenty cents a day. He was a man who had always been a farmer, but he could not answer that question. Mr. F. told him he would keep his pigs at that age for four cents a day, and he knew just what it would cost, because he kept an account of everything fed to them. Who knows how much it has cost him to cultivate an acre of potatoes? The state of agriculture in Maine was then referred to. He thought much progress was making here, but there was room for much improvement, especially in making butter. They had as good land for pastures for cows as there is in the country; but it must be admitted that the Maine people have not learned to make as good butter as is made in most other parts of New England. There are also some good animals, recently introduced into Oxford county, where, until recently, stock has been proverbially poor. The Hereford and North Devon stock are best liked; and for swine a preference is given to the Suffolk breed. They make hogs that weigh nearly three hundred pounds at eight and nine months old.

Mr. WETHERELL characterized the desirable qualities in a cow, as first, a tendency to secrete milk; second, she must be vigorous; third, docility is required. The next question is, how shall she be fed? A gentleman in Warren, who furnishes milk for the Boston market, realizes about fifty dollars a year from each cow. His feed is principally grass, his farm being natural pasture land, and the pastures were never plowed, but have plaster applied to them. Many say there is no nutrition in fatty substances. If so, it may be a question whether that kind of milk which will make the most butter is best for calves. He thought that calves would thrive best on the milk of cows which were not good for butter.

Mr. FORBES said he had never produced so much milk with any kind of feed as a mixture of oats and potatoes; the milk was also of good quality.

Mr. DICKINSON, of Heath, in Franklin county, thought it might be well to cut all hay in feeding cows. He had found a great advantage in cutting clover, which sometimes has large stalks, and feeding it with a sprinkling of meal. The people of Franklin county, where good cows cost from forty to fifty dollars, make butter and send it to Boston once in a week, or once in two weeks, according to the season; and they generally expect a cow to pay for herself in a year. Plaster does not help the pastures of that county. Mr. D. had found apples boiled and fed with a small quantity of meal, an excellent food for swine. He preferred a mixture of sweet and sour apples. He thought them worth almost as much as potatoes for feeding swine.

Mr. W. J. BUCKMINSTER, of the *Ploughman*, had found it important in feeding milk cows, to feed them systematically and to satisfy them. The times of feeding should be regular, with proper intervals. The animal should not be kept eating all the time. All animals, milk cows as well as others, require a variety of food in order to keep them in good health and contented; and health is all important in order to the production of *good* milk. The physical condition of the cow in every respect should be carefully attended to. In feeding pigs, he also liked to have a variety of food; and he would allow them when young to run out of the pen into an open field if possible, allowing them to crawl through a hole under the fence if possible, so that they may imagine they are stealing away from confinement, and getting into mischief.

Mr. SHELDON, of Wilmington, said the best possible feed for milk cows is good grass and plenty of it. Every thing else is only a substitute. At this time of the year he cut his hay and mixed with the fine feed, water sweetened with molasses, so as to give to each milk cow a half a pint of molasses in a day, which will add four ounces of butter daily. He liked corn for fodder, and sweet corn better than any other kind. He would advise a farmer to try to raise a variety of feed for cows, and he never heard any complaint of any bad taste in the milk, when cows were partly fed on turnips. As to hogs, he believed the Almighty made them on purpose to eat every thing, and that they would not thrive so well on any *one thing*, as on *every thing*. Generally, he preferred to have their food cooked, but he had found that if it was fermented so as to become sour, it was q uite as good in the summer time. He was sure of that, though he would not once have believed it. He tried an experiment in feeding fifty barrow hogs, twenty years ago; and heir keeping through the winter cost twelve and a half cents a day. One of them brought him in return, twenty cents a day, and ten cents over. His son bought a sow a little more than a year ago, for fourteen dollars. Every thing fed to her was bought, and a strict account kept of all the cost. She was fed principally with shorts and fine feed and scraps. She was sold after fourteen months, and she, with her pigs during that time, brought forty-two dollars over and above her cost of keeping. A gentleman in Winchester had tried feeding to his cow half a pint of molasses a day, in addition to her other regular food, and he found her milk to increase a pint and a half in three days.

Mr. STEBBINS, of Deerfield, thought Suffolk pigs the poorest in the State. He had tried them for a few years, and had made no good pork since he kept them. He had tried fermentation, cooking and feeding food in the natural state, and he had succeeded best when he fed meal in its raw state, stirring in with swill at the time it is fed. Having tried all ways, he was well satisfied. He expressed his regret that farmers did not raise swine more, for the purpose of making manure. They will pay for their keeping, in manure, if they can have the material with which to make it.

Mr. SHELDON said he raised a great many pigs to sell, and a good many of the Suffolk breed, because people like the looks of them; but he always told them when they came to buy, that they were not worth scarcely any thing. He would not contract to make a ton of pork from pure Suffolk swine for twenty-five cents a pound. In the first place, a sow will not breed, perhaps in a year, and then she will have only a few, and before six months half of them will be cripples.

The President of the society, Mr. Brooks, read a statement from Mr. STEBBINS, of Deerfield, being a record of twelve hogs brought by him to the Boston market. Six of them were half Suffolk, and half of the Granite breed, and the other six about a quarter Suffolk. Their average weight was 270 pounds; gross weight, 3240 pounds. He got twelve and a half cents per pound, making an aggregate of $496,85. They were from nine to ten months old.

After some further rather lively discussion as to the Suffolk hogs, in which Messrs. HOWARD, FORBES and BUCKMINSTER participated, at nearly ten o'clock the meeting adjourned. The subject for the next meeting was announced to be:—*"Farm Economy, in relation to Farm Buildings;—Farm Tools, and housing them."*

BRAIN OF THE HORSE.—We have received from Dr. DADD, of this city, a beautiful colored lithograph of the brain of the horse, enlarged. It is in two parts—the first being *the base of the brain, and showing its nerves*, and the second, *the arteries* at *the base of the brain*; the whole being accompanied by technical explanations. We learn by this, that the average weight of the brain of the horse is *two and a half pounds.*

For the New England Farmer.

A MODERN BARN.

MR. BROWN:—I met Mr. Elijah Wood, Jr., in his barn, a few days ago. He is milking about thirty cows this winter. The animals looked exceedingly comfortable, and well cared for. They were mostly lying down, chewing the cud, and quiet and contented. The udders looked full and generous, as if the cows had passed the season in a fresh clover field.

Mr. Wood's barn is a modern affair. The lean-to is on one side of the driveway, to which there is but one entrance, and across one end of the barn. The cows are fastened by stanchions, and eat from the side of the barn floor. The floor under the cows was the right length to keep clean, and the ample trench received all the droppings. The walk behind the trench was tidy enough for a lady's promenade. The light in this barn was admitted through glass windows, a decided improvement upon the *crack* system! Animals require light to be healthy. I saw a likely steer, that was wintered in a dark stable, blind of one eye in the spring.

Mr. Wood waters his cows in the barn. They drink freely in the coldest weather. His pump in the barn has not frozen this winter. The water is distributed to the cows in pails. The fodder for the cows is cut with a Gale's hay-cutter. I saw corn fodder and coarse hay, cut and soaking with a sprinkling of oil meal, in the great feed trough. Mr. Wood says if the cows leave any tough, buts not eaten, they are much less troublesome in the manure cellar for being short.

Mr. Wood says cows need to be let out about once a week, on pleasant days. This he finds necessary, to have them come in properly another year. Mr. Wood has built an addition to his barn the past season, to accommodate his horses. He considers it a disadvantage to be obliged to open the great doors upon the cows. If they see the doors open, they become uneasy, worry, want to get out. He thinks the secretion of milk goes on most favorably when the animals are perfectly quiet.

Concord, March, 1857. W. D. B.

CARROTS.

When MR. LITTLE, many years ago, astonished the world, or at least that portion of it who reside or "most do congregate" in the goodly town of Newburyport, Mass., with his fourteen-hundred-bushel crop of carrots from an acre, there were not a few who were disposed to disbelieve, while others whose scepticism was equally inveterate at first, but was finally overcome by facts, which are stubborn things no less in agriculture than in law, attributed the unprecedented achievement to necromancy, or the black art, it is said. Now a crop of fourteen hundred bushels of carrots from soil managed as liberally as was Mr. Little's, would probably—though greatly exceeding the average acreable product in this country if not in Europe—scarcely excite surprise. In this important department of farming—*Root Culture*, we mean—the capacities of the soil have never been fairly tested. We feel confident, however, as must every one who candidly examines the subject, that a new era in agricultural enterprise is rapidly approaching; that the day is by no means distant when *one-tenth* of the surface occupied at present by the patient, hard working husbandman, will yield more than he now derives annually from the whole, independent of all expense. As to the value of carrots for stock feeding, and especially as a feed for milch cows, calves, horses and swine, the introduction of facts having a direct and specific bearing upon the case would, we feel assured, be by most readers deemed supererogatory, if not absurd. We advise every farmer this year to put in a patch of carrots. If he is sceptical, or has merely a large development of "cautiousness," and does not choose to tamper with his interests by putting in a whole acre, let him put in half an acre, or even a quarter, or an eighth of an acre, and with patience wait the result. But to keep pace with the improvements of the age, he must not wait till another decade, or even a single year, has rolled by.

For the New England Farmer.

DEEP PLOWING.

MR. EDITOR:—Bringing up new mould is peculiarly favorable to almost all crops, especially wheat, clover, beans and potatoes, and, indeed, without that advantage, these crops usually diminish in quantity, quality and value. Deep plowing is of great consequence, not only in furnishing more means of nourishment to the roots of plants, but by counteracting the injurious consequences of either too wet or too dry a season. This is a most important consideration, for if the season be wet, there is a greater depth of soil to absorb the moisture, and the plants are not likely to be injured by the roots being immersed in water; and in a dry season, it is still more useful, for at the lower part of the cultivated soil, "there is thus a reservoir of moisture," which is brought up to the roots of the plants by the evaporation caused by the heat of the sun. And deep plowing is a very good way of getting rid of weeds in particular, it is the best mode of eradicating thistles; and animal and vegetable manures, which have a tendency to rise to the surface, are properly covered.

I have ever found deep plowing attended with good crops, when crops on shallow plowed land in the same field were but indifferent, which seems a decisive proof in favor of deep plowing; but in deep plowing, when new subsoil is thrown up, it should in most of cases, I think, be done in the fall; as the frost helps to soften and ameliorate the hard substances, especially where there is a hard pan.

Barnet, March 19th. J.

BEANS.—The prettiest way for a man who cultivates but little land, to raise his own dry beans for next winter's use, is—not to plant the bush kinds by themselves, for this will require too much land, as the product is small—but to raise white *pole* beans. The common case-knife beans are excellent for this purpose. Strike out a dozen circles on the ground as large as a cartwheel. Put a wheelbarrow load of manure into each, and spade it up with the earth. Drop the seeds in the circle, on the

outer edge of the hill, say six inches apart. Then insert eight or ten poles just within the circle, at equal distances from each other, and tie the tops of the whole together—forming a cone. Cover up the seed and wait the result. Each of these hills will yield you a peck or half a bushel of dry beans next fall—which, if you have but a dozen such hills, will give you perhaps half a dozen bushels. This will be enough for your purpose. By this course but a little land is occupied. Pole beans yield much more abundantly than bush beans, and occupy air, whilst the latter must have the surface of the earth. If you wish to produce your own dry beans, reader, try this system the present season.

EXTRACTS AND REPLIES.

MILLET.

Please inform me where the seed can be obtained? If it will do well on ordinary land? How much seed is required to the acre? If the proper way to seed would be to mix the millet, Timothy and clover together, and how much of each, or the two last named, to the acre? E. D. TARBELL.

Chester, Vt., 1857.

REMARKS.—The seed is sold at the agricultural stores, and will give a good crop on ordinary corn land. Eight to twelve quarts of seed per acre are sufficient. Cut the crop when green if you do not wish it to exhaust the land—then plow in August or early in September, and sow your grass seed. Sow twelve quarts of Timothy seed and six pounds of clover per acre—but sow the clover seed next March on the snow.

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BARNS, TREES, &C.

I take the liberty of asking your advice about the arrangement of barns and sheds for a farm of 130 acres, both for convenience and the saving of manure? Whether a cellar is of much importance, and also the best way of saving the liquid manure? (*a.*)

What kind of trees are best to set in a hedge to break the wind off from the land and buildings? (*b.*)

Can you give any information about the basket willow, its present price per ton, and whether there is much demand for it at its present price?

What kind of sheep are the most profitable for a farmer to keep who keeps only a few, as regards the wool, lambs and mutton? (*c.*)

By answering the above you will greatly oblige

Ludlow, Vt., 1857. AN OLD SUBSCRIBER.

REMARKS.—(*a.*) To answer your inquiry as to the arrangement of barns and sheds for a farm, and answer satisfactorily to ourselves, would require considerable time and space. The internal arrangement we will say nothing about; that depends upon the kind of farming that is to be done, and very much upon taste. The location is very important. If too near the house, there is the danger of fire, in case the house is burned, and the inconvenience from unwholesome odors in warm weather. Where a barn is ten rods from the house we think the amount of travel between them, back and forth, is not less than *three hundred miles* a year; that is an item of expense of some consequence. The barn-yard should face the south if possible, with a shed or high fence to keep off north-easters. Cattle, sheep and swine, indeed, all the stock of the farm, love the sun; and it is better for them, especially for young cattle, in quiet, sunny days, to spend a portion of the time in the open air, basking in the sun, but sheltered from cold winds. So arrange accordingly.

A *manure cellar* is of importance in several respects; it prevents evaporation and desiccation; it keeps the manure from freezing, thus affording the farmer an opportunity of working it over during the winter and mingling it with other materials, and, if he chooses, of hauling large portions of it to his fields. It enables him to save nearly all the liquid portions of the manure by introducing dry muck or loam, leaves or other litter.

There should also be a portion of the cellar reserved for roots, vehicles, grind stone, casks, &c.

(*b.*) White pines are easily transplanted, grow rapidly, are beautiful to look at, and answer the purpose of a screen as well as any other tree. The limbs should be left close to the ground, and the trees well mulched the first few years. But other trees may be mingled with them to suit the taste of the operator.

(*c.*) We cannot say what sheep are the best—but those the *best kept* will soon be good if not the best.

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REMARKS ON THE STIFLE CASE.

MR. EDITOR:—I noticed in the *Farmer* an inquiry, "What would cure a stifle?" I once bought a mare seven years old which had a dislocated stifle; it was so bad that she had not much use of her leg. I took a peck of fine, strong hemlock bark, which I steeped and boiled down quite strong, and washed the stifle with this hot liquor, and warmed the part with a hot shovel; in three weeks the mare was apparently sound. I bought her for $25 in February, 1844, and the next May she was worth $100. I write this that it may benefit Mr. G. W. Hayes, Jr., and others. L. AMES.

Vermont, 1857.

—

ABOUT A COLT.

I have a colt who is continually rubbing himself, and had rubbed the skin off in many places before I noticed anything ailed him; upon examination, I found in spots a kind of wart dried upon his hair next to the skin. By rubbing, the skin and hair comes off in spots from the size of a three cent piece up to a ten cent piece; the skin heals up in a few days. I would like to be informed as to what remedy I shall use for it? What will prevent dandruff on colts? B.

Marlboro', N. H., 1857.

—

FYLER'S CHURN, AND GOOD BUTTER.

A "*Windsor County Farmer*" will please accept thanks for his generous and prompt action in rela-

tion to our "broad hint" about *the churn*. We really do not need a new churn unless there is a *better one* than the half dozen we already possess; if there is such, we should like to know it ourselves, and inform "the rest of mankind" of the fact.

—

FINE CATTLE.

I saw in this village yesterday, a pair of cattle weighing alive 5100 lbs., apparently seven years old, said to have been reared at Shelburn, Franklin County, Massachusetts. They were straight, bright, and well filled out—their horns indicating their breed to be Durham. They were estimated to weigh 4000 lbs. dressed, and to be of the value of $500. When cattle will command such prices —what can the farmer do better than to raise them? They were at the place of business of Messrs. Teel & Moulton. We understand they were reared by Mr. Bardwell.

March 21, 1857. SOUTH DANVERS.

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RECLAIMING MEADOW OR BOG.

I have some 5 or 6 acres of low land called swamp, covered with maples, whortleberries, alders, &c., adjoining a salt marsh; and its greatest elevation, adjoining the upland, 4 feet; distance from marsh to upland, 20 rods. Peat bottom, depth from 3 to 15 feet, all nearly dry in summer, and can be passed over dry shod, or without trouble of water.

Now I wish to know the best course to pursue in order to convert it to English grass, cranberry bog or tillage. JAS. ROBBINS.

Osterville, March, 1857.

REMARKS.—We have so often given the process to accomplish the result here desired, that it seems to us like an old story to go over it again. But briefly,—thorough drainage is the first step; but not so low as to leave the surface like a dry sponge. After draining, manure liberally; plant with potatoes, or other crops for a year or two, and then lay it to grass.

—

USE OF LIME.

I should like to know which is the best way to use air slaked lime for agricultural purposes, whether it ought to be spread on the surface? What kind of land will it do best on, or whether it would do better mixed with other manure before being used?

E. Freetown, Mass., 1857. R. WASHBURN.

REMARKS.—Spread on the surface. If the land is heavy and full of vegetable matter, it will stimulate it to fertility. Use it sparingly on light land.

—

HOW SHALL SHEEP BE FATTENED?

Can you tell me the best way of feeding sheep in the *winter* for fatting? What kind of food, and what sort of pens, will be the most useful, and the quantity of food a day? SAMUEL LYMAN.

Southampton, Mass., 1857.

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THE YELLOW BRAKE.

I wish to know if there is any way to kill the yellow brake without plowing? My land is so filled with stone that I cannot plow.

Nelson. 1857. SAMUEL GRIFFIN.

HORSE DISTEMPER—WENS.

I see in your March number, on page 115, in the receipt that I sent you there is a mistake in one word, it being *horn* distemper, instead of horse.

Will some one tell what will cure wens on cattle?

Cummington, 1857. E. P. WILBUR.

—

CHINESE SUGAR CANE.

I should like to know whether the Chinese sugar cane is the same as the Chinese tree corn, which was so highly recommended fifteen years ago or nearly, by agricultural papers. J. P.

Auburn, N. Y., 1857.

REMARKS.—We think not.

—

A POTATO STORY.

A single potato planted in the spring of 1856, by a boy ten years old, yielded when dug in the fall *one hundred and sixty-one pounds*, and one single potato weighed two pounds and one-half.

S. Hampton, N. H. A SUBSCRIBER.

For the New England Farmer.

INDIAN CORN.

That this crop is of vast importance, is manifest from the fact that "it is best adapted to the soil and climate, and furnishes the largest amount of nutricious food" of any crop cultivated in the United States. In New England, according to the last census, the production of this grain increased nearly 50 per cent. in the ten years previous, while wheat *decreased* in about the same ratio. Take one year with another, the common eight rowed yellow corn is as profitable as any; though sometimes, when the season and all else is favorable, a great crop may be obtained from a larger kind. On dry ground, with the manure (eight or ten cords) from the barn cellar spread on and plowed in, forty bushels per acre of shelled corn is about an average crop with us. By the way, whether manure from the cellar is better or not than common, it is made to *act* quicker, by working it over to the air with loam or mud, so that nothing is lost. The oldest barn cellar that I know of was made some sixteen years ago; now, though this section of country is like most all agricultural communities, thinly settled, I can count thirty not five miles off, which is probably not three-fourths the actual number.

For corn on high ground, put no manure in the hill. Plant three feet four inches apart, each way. Cultivate both ways, or, rather, horse-hoe it.—Make no hill of any consequence. Plant five kernels in a hill, which, if not thinned out, make it too thick, unless the worms take that part of the job. Plant early, though there is such a thing as too early. I planted corn on the 6th of May last, on land plowed the 26th and 28th of April; there was rain just before and after planting, and somewhat cold. This corn came up well, but was yellow, and looked like destruction, till July, when it did better, and the frost holding off late, was very good. I plowed another piece alongside the first, the 12th and 13th of May, planted the 14th; everything similar except time; the last came up, and looked better colored, grew right off, and was considerably the best at harvest. JOSEPH W. BROWN.

Kensington, N. H., 1857.

For the New England Farmer.

COST OF MILK-RAISING.

MIDDLESEX VS. WORCESTER.

MR. EDITOR:—Will you permit me to compare notes with your correspondent, "Worcester," in your March number, page 145, whose figures I have examined with some interest, but with more surprise at his results. The following are facts which may speak for themselves.

One year ago I purchased a cow from Maine and removed the calf from her on her arrival. She comes in this year on the 18th of June.

I have milked her just 365 days with the following results. She has averaged 10½ quarts per day in the winter, and 14 quarts per day in the summer.

I have sold 7 quarts per day to regular customers, 2,555 quarts, at 5 cents per quart	$127,75
Transient customers, 239 quarts, at 5 cts.	11,95
Used in family of 8 persons, 2½ quarts per day, 912 quarts, at 5 cts.	45,60
Total	$185,30

EXPENSE.

Paid for 3 tons of rowen, at $17 per ton	$51,00
Carting rowen	6,00
Pasturing	10,00
Driving to pasture	3,00
Carrots raised in garden, one half ton	4,00
Shorts, 500 lbs. at $1,25	6,25
Meal, 8 bushels, at 80 cts. per bushel	6,40
Total expense	$86,65
Net profits	$98,65

If there is an error in the foregoing result it must be on the safe side, as having milked myself, I am confident the average, as before stated, is nearer the truth, which would result as follows:

During summer, say 215 days, at 14 quarts per day, 3010 quarts, at 5 cts.	$150,50
During winter, say 150 days, at 10½ quarts per day, 1575 quarts, at 5 cts.	78,75
	$229,25
Whole expense, (the manure pays for feeding and milking)	$86,65
Net profits	$142,60

New England farmers, be not incredulous! I have no doubt that multitudes of cows, with proper care and warm stables, might do even better, and be a source of great profit. Worcester may say, we sell our milk too high. We answer, this is the way we do things in Middlesex, and we are not able to meet the demand at this price. SOUTH READING.

March, 1857.

A MURRAIN APPROACHING.—A correspondent of the London *Times* says that an exceedingly fatal epidemic has been for some time ravaging the herds of Central Europe, and has now reached Konigsberg, where one proprietor is said to have lost three hundred head in a night. The writer says:

"In 1745, the same or a like epidemic was introduced into England by means of two calves from Holland. In the second year after its introduction over 40,000 cattle died in Nottinghamshire and Leicestershire, and almost as many more in Cheshire. During the third year remuneration was given by the government, who had ordered the destruction of diseased cattle, for no fewer than 80,000 head, while twice as many more, according to the report of one of the commissioners, died of the malady. In the fourth year it was equally fatal, nor does it appear to have completely disappeared till eight years after."

On the Continent every exertion is being made to arrest the progress of the infection, and military detachments are charged to destroy all cattle that become infected in Prussia. If only one of a herd should be attacked, the authorities order the whole to be slaughtered; and *cordons sanitaires* are established along the frontiers to prevent the ingress of cattle from districts in which the disease exists. If these statements are not exaggerated, the loss of so many cattle must seriously diminish the supply of food in Europe, and may give rise to insurrectionary movements on the part of the people.

For the New England Farmer.

CORN CULTURE.

MR. EDITOR:—As corn-growing is a business of no small importance to our State, I would like to give what I deem the surest, as well as the most economical method of cultivation.

The 15th of May, I cart on to swarded ground what long or barn manure I have; spread the same, then plow immediately, quite deep; harrow the ground slightly, then plant the seed in rows four feet apart each way, putting about one quart of compost, made of vault manure (or something of nearly equal strength) and good loam, in each hill. This has been my practice for some years, and I find my corn comes up readily, is not troubled with any kind of worm, is not easily affected by drought or wet, and if the soil is mellow, by using a long fine teeth harrow two or three times, both ways between the rows, very little hoeing besides is needed.

Farmers having suitable ground, will find this practive advantageous in various ways, securing, as it does, the benefit of the decomposition of the manure and the sward to the present crop, and also leaving the ground in a good condition for the crop of the next year, when the plow should be put in again deep enough to bring to the surface all that has been turned under. Yours, &c., E. JOY.

New Market, N. H., 1857.

PRICE OF LABOR IN CALIFORNIA.—A writer for the California *Farmer*, in stating reasons for the immediate commencement of woolen manufacture in that new State, gives it as his opinion that a sufficient number of operatives can be found there to work up the raw material now produced, and at a figure not much above the low price in the Eastern States. He says: "I repeat it; we have cheap labor, for who has not heard in mining, agricultural and city-loafing localities the almost universal complaint—'can't get employment; would rather work for my board than wait here for water, or for plowing time to come, or for work on the new brick store." Put this with the stories which are afloat of the enormous wages that are paid in the land of gold, and it may, perhaps, add another drop to the bucketful of contentment with our lot in New England that we have a right to enjoy.

☞ Receive your thoughts as guests, and treat your desires like children.

MASSACHUSETTS AGRICULTURE.

We have before us the *Fourth Annual Report of the Massachusetts Board of Agriculture*, for the year 1856. It is comprised in a handsome volume of between three and four hundred pages, and illustrated with specimens of several of the grasses and farm implements. After recapitulating the general duties of the Board, speaking of the distribution of seeds, the formation of an agricultural museum, the collection of minerals, soils, models of fruits, birds, fishes, plants and insects injurious to vegetation, the Secretary speaks of the operations of the Board for the past year, and some of the difficulties with which they have had to contend in the want of a larger working capital. He says "the appropriations made for the farm are not spent for experiments, and it might almost be said that not a dollar has ever been spent by the Board for experiments on the farm; the cost of the experiments consisting mainly in the additional care and closeness of observation which they require, the amount of which in direct expense to the State is comparatively insignificant."

He next proceeds to a discussion of "the grasses, a family of plants the most extensive and the most beautiful, as well as the most important to mankind." This is a topic of great interest to our New England people, and one which has never received half the attention it merits. The varieties well known to be nutritious and profitable for cultivation have been very few, scarcely exceeding a dozen, and the true manner of seeding and of preserving them for fodder, is veiled in as much mystery as their botanic names. The number of beasts fed upon the grasses shows at once their importance; these are given according to recent official returns, as no less than 80,321 horses; 77,511 oxen and steers, and 183,010 cows and heifers, valued in the aggregate at $15,423,524; while we make annually 648,610 tons of hay, being less than a ton to the acre, and valued at $8,702,917. The annual value of the grass crop to the country, for pasturage and hay together, is not less than $300,000,000.

In the early part of the paper on grasses, the Secretary has introduced a plate illustrating the grasses, and giving the technical names in common use by botanists, and the parts as highly magnified, and made so plain as to be easily comprehended by all who will give the explanations their careful attention. Then follow tables, fruits, a list of *grasses and forage plants*,—second, a list of *arrow grasses*, third, a list of *grass-like rushes*, and fourth, a list of *cances or sedges*; these are then separated into four or five distinct groups in order to facilitate the study of them.

The first of these groups is the *bush* or *jungle grass*, or such as are not inclined to grow with other species, and form a close, matted turf sward. The second gives the names of the *aquatic* or *water grasses*; the third the *marsh* or *salt grasses*; the fourth, the *field* or *pasture grasses*; and the fifth, *annual weeds*.

The next discussion is on the *relative value of the grasses*; in this there are also sub-divisions, showing in separate tables the natural and the artificial grasses, and giving an analysis of them, and of the weeds. There is also a table giving the nutritive equivalents of the grasses, but among these are included what are generally known by other names, such as wheat, corn, barley, oats, &c. Then follows a paper on the *influence of the seasons*, with replies to questions sent out by the Secretary, and the mean temperature and amount of rain at several different places during the fast growing months.

The *time for mowing*, *selection* and *mixtures of grass seed*, weight and average depth of covering, together with a table showing the average number of plants and species to the square foot of sward, each forms a paper at once interesting and useful. Several tables are given, grouping the varieties of grasses, for particular uses, such, for instance, as for permanent pasture, lawn grasses, for mowing in rotation, for lawn pastures, for hay and pasture in orchards and shaded places, for mowing on light soils, on peaty lands, on marshy lands, for rocky hills and dry yards. The Secretary then gives examples of the general practice as reported to him.

The subject of mowing machines is then introduced, and illustrations of Manny's, Ketchum's, Allen's and Heath's are given. To the latter machine was awarded the premium of one thousand dollars, offered by the Massachusetts Society. The important topic of cutting and curing grass for fodder is considered in this connection. Illustrations of the horse-rake and hay-caps are also introduced, and their merits discussed; the general treatment of grass lands, such as drainage, top-dressing, &c., are briefly noticed, which closes the paper on the subject of the grasses.

So far as we are capable of judging, we think this an able paper, one that required considerable technical learning, and great research, to prepare. In this department, the labor has fallen into proper hands, for the Secretary is abundantly qualified to prepare any similar work with great accuracy and minuteness of detail. His habits of life, as well as his genius, fit him for such a labor, rather than the general engineering and detail of the manipulations of the farm. It is a work greatly needed, and we hope it will be published in separate form, so that the farmers generally of New England may have access to it.

Various highly interesting reports of committees of the Board, and of delegates to the several county societies, close the volume.

Altogether, it is a work of value, and one to which we shall have occasion frequently to refer.

For the New England Farmer.

WHAT WILL YOU DO WITH THAT DEAD ANIMAL?---No 2.

Eggs, during the present winter, have been remarkably scarce, and have brought prices in proportion to their scarcity. Thirty, forty and fifty cents a dozen for eggs, and not golden ones, either! The principal reason for this unusual scarcity has doubtless been the remarkable coldness of the winter. All the energies of the fowl are expended in keeping her system at a temperature sufficient to preserve life; if she could be aided in this matter of warming herself, her superfluous vitality might then be spent in producing eggs, one necessity for which is a full flow of blood, and a high temperature of the body; both of which are greatly promoted by feeding with animal food, fat and flesh. The fierce appetite of fowls for animal food at this season of the year, particularly those producing eggs, is a proof from nature of their need of it; and at the present price of eggs, we can well afford to feed them on rump steak, if no other meat is accessible. What family that keeps fowls can afford to sell its waste, fresh fat to the soap-man, when eggs bring thirty cents a dozen, and upwards? In fact, our fowls must have animal food of some kind, if we wish them to lay well.

Now, if a horse, cow or ox has died in your neighborhood during the past winter, from accident or from some disease which does not impair the value of the flesh as food for fowls or for your dog, it will certainly be cheaper to feed them from its remains, than to pay from five cents a pound upwards for flesh, which for this purpose is not worth a farthing more. It may be well to state, in passing, that scientific men have proved by experiment that a high temperature, equal to that at which meat is baked, completely destroys the virus of the most contagious and virulent disease to which our domestic animals are subject. The carcass of an animal, if kept frozen, will keep forever. In 1803, a mammoth was found frozen in the ice of northern Siberia, whose flesh was in such a perfect state of preservation that it was fed by the inhabitants to their dogs; and yet, geologists are generally agreed that the animal died six thousand years ago, at the *lowest* estimate.

The savans of Europe have introduced the flesh of the horse on their tables as a luxury; they tell us that it is finer grained than that of neat cattle, and generally equal to it in flavor, while by some methods of cookery, it was pronounced markedly superior. Who, all prejudices founded on association aside, can give a good reason why the flesh of the horse should not form an article of diet? There *is* something in a name in this matter. We all know the story of the officer at a grand feast among the South Sea Islanders who ate quite heartily of fine duck, as he thought, and smacked his lips over the choice delicacy, until he was informed that instead of being "quack, quack," it was only "bow-ow-ow," when his stomach immediately rebelled. We confine our diet among quadrupeds to herbivorous animals; why then exclude the horse, the noblest and cleanliest of them all? As far as this matter has an economical bearing, it is certainly true that the horse is worth far more in the stable than at the shambles, and that to purchase the flesh of a well conditioned horse, if killed purposely for eating, one would have to drop dollars into the scale; but yet, it is well known that in our largest cities, hundreds of the finest horses are killed yearly, solely from the breaking of limbs; now, if the poorer classes of the cities, who can afford fresh meat not over often, and then of the poorer qualities, continue to allow the flesh of such to be given to the dogs, or be still more degraded, I have great faith that the epicures will have a word to say about such a manner of disposing of them before many years have elapsed. Such is the scientific utilitarianism of an age that is fast over-riding all our prejudices, and demanding the utmost returns from every resource.

J. J. H. GREGORY.

Marblehead, March, 1857.

For the New England Farmer.

MURIATE OF LIME.

MR. EDITOR:—In the weekly *Farmer* of Jan. 3, Mr. Gould made some comments upon a previous article of mine on the above-named subject, to which I intended to make a brief reply, but have delayed so doing till the present time, for the purpose of hearing what others might say upon the fertilizer in question.

Mr. Gould thinks my ill success is "a *rare* exception rather than the rule," or that my "soil may not have required this manure." He seems to have overlooked the fact that I do not stand alone against his fertilizer, and that I mentioned that *three* of my neighbors had tried it and been equally disappointed with myself. Taking the experience, then, in my locality, my case does not seem to be an exception to the rule; and I am inclined to believe that if all who have used it in other sections would freely give their experience, without importunity or bias, I should be found to harmonize with the rule in other localities. I certainly am of the belief that my soil did not require his fertilizer. But Mr. Gould says that it is good on all soils—on clayey soils in particular—and Dr. Jackson recommends it for "siliceous soils." Now if the small proportion of other ingredients, besides the carbonate of lime and salt, constituting the fertilizer are really beneficial, planted in the hills or in drills, we are obliged to use so much slaked lime (which is more or less caustic) that it burns up the plants and destroys the good effects which the other compounds might exert by themselves. Who thinks that a hill of potatoes or corn will need or bear two or three gills of half-slaked or slaked lime? or that the fibrous roots of peas and beans, squashes and other tender plants, can ramify into it with that impunity with which they should in all proper manurial substances? Is not the fertilizer a little *too rich in lime?*

Mr. Gould observes very pleasantly, that he shall take occasion to bring forth a "cloud of witnesses" to sustain the evidence which he has already published, and hopes to be able to scatter my "brick-dust and coal-ashes" to the wind! To this I certainly cannot in conscience make any objection; but will simply express a modest wish, that when they take the "wings of the wind," they may not fly towards Charlestown. In regard to the witnesses, I will speak of those further along.

When I used the muriate last spring, I had seen no statement either from the proprietor or any one else, that the article should be composted or mixed; I therefore used it as did Mr. Brooks and

some others, putting as much as I could grasp in one hand, and sometimes more, into a hill of potatoes or corn, and making the ground white with it in the drills, and raking it in. *Now* Mr. Gould says it should be mixed "with barn-yard compost, which is too rich in organic and needs saline matters, which my manure furnishes." This certainly is placing the muriate in good company; but if the barn-yard manure could speak, would it not resent the caustic impeachment? Is not the idea contained in the above quotation an agricultural heresy? I have supposed that good stable or barn-yard manure contained all the elements for the formation of plants, both organic and inorganic, in their proper proportion, and that the only objection to it was, that it could not be got in sufficient quantities, or at reasonable rates, when not made on the farm. But it is needless to show here the superiority of barn-yard manure over all the fancy fertilizers, as it is too well known. This auxiliary which Mr. G. would furnish is the lime, which burns up vegetable soil and prepares it for the food of plants, and kills insects by its caustic nature, yet applied to the manure heap does not set the nitrogen free, but "contains ammonia, and will absorb even more." Rather than admit that barn-yard manure needs his fertilizer, I should be more inclined to believe that his fertilizer needed barn-yard manure!

Mr. Gould is surprised that I have not distinguished between quick-lime or the semi-hydrate of lime, and the compound which makes up the composition of his fertilizer. The following are the compounds, as given by Dr. Jackson.

Carbonate of Lime	54.00
Chloride of Sodium (Salt)	14.40
Phosphate of Lime and some Oxide of Iron	6.50
Chloride of Calcium (Muriate of Lime)	2.70
Chloride of Magnesium (Muriate of Magnesia)	2.40
Ammonia	6.41
Organic Matter	4.59
Fine Sand	8.50
Loss	0.50
	100.00

It will be seen that the principal, solid portion of this compound is carbonate of lime—or what is commonly called slaked lime. In perfect harmony with the redundancy of this cheap ingredient, Mr. Gould writes four pages of his circular, (the great body of its text) to show the beneficial effects of lime or carbonate of lime—citing Liebig and Sir Walter Scott—without alluding to the other compounds, and which he is so surprised at me for not mentioning. If Mr. G. thought *then* they were of great importance, why did he not bring them out in bold relief, and not rest the claims of his "muriate of lime" upon that common substance, carbonate of lime? And can he consistently be surprised at me for passing over what he did not consider worth special notice from himself? It is true there is no quick-lime presented in his analysis, nor semi-hydrate, nor semi-carbonate—but carbonate of lime. Now what is the difference in the ultimate effect of all these upon the soil? The quick-lime absorbs carbonic acid gas and moisture from the air before it can enter into the composition of plants, and before it becomes fully a carbonate it must be a semi-carbonate, or semi-hydrate, as some speak of it, as it gradually absorbs water. I do not consider the bulk of Mr. Gould's fertilizer as reduced to a carbonate, but that it is full of small lumps of quick-lime, and hence its injurious effects on tender roots when planted in the hill for the ordinary garden purposes, as he recommends.

But Mr. Gould, in his article in the *Farmer*, draws attention to the other ingredients of his fertilizer. The next after carbonate of lime, is salt; the next is fine sand; the next, "phosphate of lime and some oxide of iron;" little ammonia and organic matter, and muriate of lime only 2.70 per cent. What the effect of these would be, separated from the carbonate, I am not prepared to say; but believe that, used with the carbonate in the hill, their virtues, if they possess any, are destroyed—and that the whole compound retards the growth of plants not naturally rank enough to overcome it.

In Dr. Jackson's analysis of "Hoyt's Superphosphate of Lime," 48 per cent. is of that ingredient; hence the propriety of the name. Upon this rule, Mr. Gould's compound should be designated "Carbonate of Lime," or "Semi-carbonate of Lime," instead of "Muriate of Lime," the smaller element; then no one would be deceived in the cognomen.

A few weeks after my communication appeared in the *Farmer*, an intelligent gentleman of this town observed to me that he was glad to see the article, as it expressed his views of the "muriate" to a good extent, and he gave it a severe appellation. He stated that he had tried the compound in most every way in which it could be used, and to a large extent, in the hill and in the manure heap; that in the hill it seemed to burn up his vegetables, and that his compost heap was better without it. He also stated that many of his neighbors had tried it with no better success.

In regard to "witnesses" Mr. Gould is quite successful. He now has many more than I have, and his "cloud" has not yet appeared. But perhaps he has made much greater efforts to procure them, I know of only four besides myself, who have tried it, and they all condemn it. Why the witnesses should so disagree upon this subject, is one of those questions which inductive philosophy has not yet solved, unless that some of their soils needed common lime.

Some of Mr. Gould's correspondents, whom he has formally requested to give their views upon his "muriate," regard it as "one of the best of manures," or fully equal to guano or superphosphate of lime, when used as a top-dressing or plowed in—poor as I regard its formula, chemically considered. But to this I can find no fault. Some good may result to those who do not esteem it. The more agriculturists are satisfied with it, the more the manufacturer will sell; and the tendency will be to bring down the price of the superphosphates of lime and guano—which is a "consummation devoutly to be wished."

Mr. Gould may have had his attention drawn to the analysis of his muriate by Prof. J. W. Johnson, published in the *Homestead* at Hartford, Dec. 25. Since writing the above, I have had a copy handed me. Mr. Johnson detects "quick-lime" and a good deal of "hard coal dust" in it. This does not surprise me; but according to Mr. G.'s admission in his new application of his fertilizer, it must set the ammonia free in the compost heap rich in nitrogen, where he intimates its wonderful efficacy lies! Mr. Johnson finds in it no "potential ammonia," or "phosphoric acid," and in a word declares it inferior to "leached ashes." Is it not inferior to coal ashes?

Mr. Gould advises me to try more of it, using some singly, and mixing some with compost, and note the results. This I have done, though not in the same season. Corn and potatoes planted one season without it I have compared with the same planted another season with it, in connection with a compost of night-soil, and obtained no favorable results; used alone in the hill, as I have intimated, I consider it positively dangerous. Besides, I have carbonate of lime on hand,—not much unlike Mr. Gould's, probably—which I can use whenever I think it may be serviceable.

Further I have no desire to discuss the subject.

D. W. LOTHROP.

West Medford, Feb. 2, 1857.

EXTRACTS AND REPLIES.

CURE FOR WENS ON CATTLE.

MR. EDITOR:—I observed in the *Farmer* of March 28, an inquiry of E. P. Wilder, if some one will tell what will cure wens on cattle. While reading this, I felt a strong inclination to give him the remedy I have always used in such cases, with entire success.

I take a tin cup, large enough to cover the wen, fill it about half full of unslaked lime, then nearly fill it up with soft soap, bind it on the wen tight, with strips of cloth or straps so that it will not come off. As the lime slacks, it eats the wen completely off. I tie the cow, or ox, to a hook in the beam in the centre of the stable, to prevent their rubbing off the cup. Let them stand tied four or five hours, and the work is done. A. B.

Russell, April 2, 1857.

BREWERS' GRAINS.

Are brewers' grains good to feed milch cows, and growing swine, and will it pay to buy them for that purpose? CHARLES R. DAMON.

Cochituate, 1857.

REMARKS.—Brewer's grains are undoubtedly excellent feed for cows in small quantities, and as a change of food. But they should be used sparingly. Whether they would prove profitable, or not, depends upon the price you pay for them.

SPECIFICS FOR MOIST LANDS.

Much is said about the use of guano, phosphate and muriate of lime, bone dust, &c., and I have watched the experiments as they are reported with a good deal of interest to see if they were applicable to my own case. I find them most all reported as being on light or sandy soils. We have, in this vicinity, (White River Valley) lying just back of the intervals, a large portion of land lying in swells, some rather steep, and other more level and flat, of a marly nature; it is easy to till when not too wet, and moisture dries up very readily. It has been plowed, hoed, sowed, mowed and pastured, till it now yields only a light return. Now I wish to inquire if this land can be improved by the use of any of the above named stimulants, either with or without a light application of yard manure, and which of those stimulants are most applicable to soils of that character; whether, in case no manure is used, it would be best for the land, to plow and plant with corn and follow with small grain and clover, or to plow and immediately follow with small grain and clover, or, perhaps, a mixture of grasses. The great object seems to me, to be to make this land produce a paying grass crop, and, at the same time, pay for its own improvement. If you or any of your correspondents will answer these inquiries you will much oblige a subscriber.

Sharon, Vt., 1857. A. S. P.

REMARKS.—Such land as you describe is well calculated to receive guano, and probably it may be used with profit for one or two years, if barn manures are also added to the land. Bone dust or superphosphate of lime would also be useful as a stimulant, but none of these ought to be depended upon to bring the entire crop.

INSECTS ON YOUNG TREES.

I find the branches of my young apple and pear trees much damaged by some insect. This insect has made an incision in the bark from an eighth to a quarter of an inch in length, and deposited its eggs beneath. These egg are so small as to be hardly perceptible, unless closely observed. It is something new to me and threatens to be very formidable. Can you or any of your correspondents give any information with regard to it—any preventives or remedies? If so, it will be thankfully received by at least one of your subscribers.

P. S. Enclosed, I send you a twig with the incision made by it, and its eggs. N. P.

REMARKS.—We have examined the specimen you sent, under a microscope, but could discover neither insect nor eggs.

THE DEVONS.

Beautiful delineations of fine animals of this class are given in the Patent Office Report, (Agricultural,) for 1855. For these pictures I am much obliged. They are so much superior to the ordinary trash put forth in modern engravings, that I feel that I am in better company. Cheap engravings, of all things, are the most contemptible stuff. Give them good, or give them not at all. From the slight examination I have been able to give to this volume of 500 pages, just come to hand by the favor of our obliging Representative, Mr. Banks, I think there has been great improvement in this department. If they would take care to get their comments from those only who understand what they say, and not from those who are distinguished for their proneness to be *gabbling*, either with or without knowledge, the book would be entitled to regards as a NATIONAL AUTHORITY.

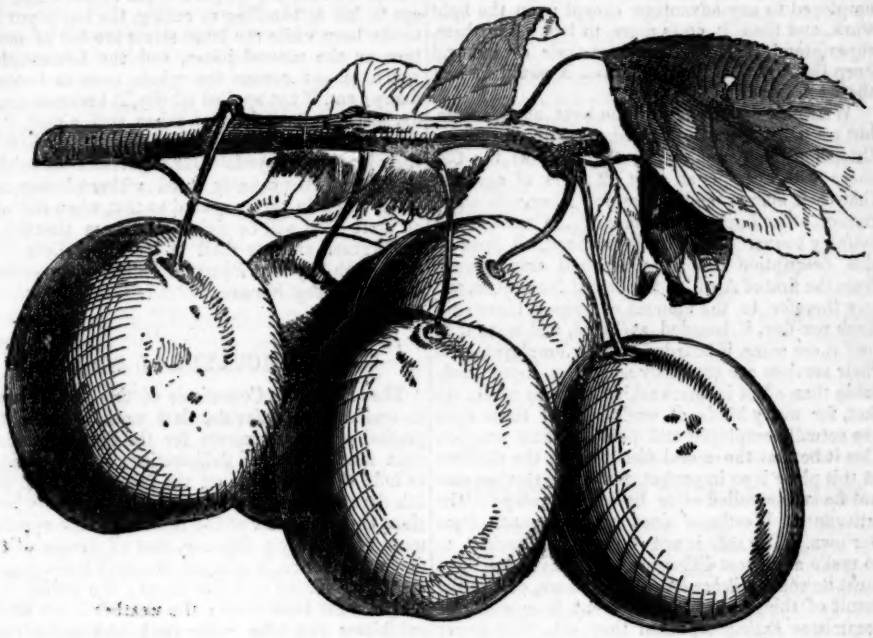
March 30, 1857.

A LARGE COW AND CALF.

Seeing a statement in the Greenfield *Courier* that E. H. Williams, of Sunderland, Mass., has a Durham bull calf ten months old which weighs 700 pounds, I wish to inform your readers, and also friend Williams, that Abner Curtis, of East Abington Mass., owns a heifer calf nine months old which weighs 722 pounds; the mother of the calf weighs 1562 pounds. Beat this you who can.

A. BROWN.

East Abington, March 28, 1857.



JEFFERSON PLUM.

The above engraving is a very accurate representation of a specimen of the Jefferson Plum, which we gathered last fall in the garden of Mr. HENRY VANDINE, at Cambridgeport. The Jefferson is one of our most valuable plums. Col. Wilder classes it as second only to the Green Gage. Cole, while he says it is not *the* best, gives it a very high rank, and classes it among the first-rate varieties.

Downing says, "If we were asked which we think most desirable and beautiful of all our dessert plums, we should undoubtedly give the name of this new variety. When fully ripe, it is nearly,—shall we not say *quite* equal in flavor to the Green Gage. But when we contrast the small and rather insignificant appearance of the Green Gage with the unusual size and beauty of the Jefferson, we must admit that it takes the first rank."

The fruit is large, roundish oval, somewhat narrowed at the base, and marked with a slight suture; greenish yellow, changing, as the fruit ripens in the sun, to a golden yellow, with a faint purple blush; stalk about an inch in length, set in a slight cavity, and rather stout; flesh fine and juicy, of a rich orange color and high flavor; ripens from the last of August to the 15th or 20th of September. The tree is a moderately vigorous grower, and a very prolific bearer. The fruit hangs long on the tree, and is not very liable to rot. We think this variety was originated by the late Judge Buel, at Albany, N. Y.

The ill success attending very many of the attempts to raise plums, which have been made in this vicinity within a few years, has influenced many persons in their choice of garden fruit to leave out plums altogether. Though disappointment may often have been the result, we should counsel continued trials, and should advise no one to abandon this delicious fruit until its profitable cultivation is proved to be impossible. The black wart and curculio are hard enemies to contend against, but when a tree can be saved from the blighting effects of the one, and a crop ripened in spite of the other, we think the fruit will amply repay for any pains that may have been taken to secure it.

We may as well say, in passing, that we have never seen finer trees than Mr. VANDINE'S, and whether from a soil especially adapted to their growth, or from more judicious care, he has succeeded in keeping his trees entirely free from wart.

For the New England Farmer.

LABOR OF BOYS.

In the well considered Report on Labor on the State Farm, p. 240, it is said, "the boys cannot be employed to any advantage except upon the light work, and then it costs more to look after them, superintend their work, prevent their escape, and keep them out of mischief, than it would to hire the work done."

We know not the age of the boys at this farm, but presume, from the provisions of the State, authorizing the commitment, that 300 of the 600 there will average at least 12 years of age, and that their energy and fitness for labor will equal that of other boys of the same age, in most of our country towns. In my neighborhood, all boys of this description can have constant employment, from the first of April to the first of November, and pay therefor to the amount of two or three shillings per day, if boarded at home, and more than half these sums, if boarded by their employers, and their services are anxiously sought as more profitable than adult laborers asking twice as much. In fact, for many kinds of work, girls of these ages are actually employed and paid the same amount. Can it be that the moral discipline of the children at this place is so imperfect, that their services cannot be so controlled as to be worth having? The latitude of Westboro' does not vary much from our own. The soil is not so essentially variant as to make any great difference. It seem to me there must be some *stitches loose*, somewhere, or else the result of things would be different from what the committee anticipate, when they say, "But under the present system, there is great danger that the object for which the State Farm was placed in charge of the State Board of Agriculture may be defeated."

AGRICOLA.

March 25, 1857.

EFFECTS OF CLOVER HAY ON ANIMALS.

Some late writers have taken the position that clover hay produces a most injurious effect on domestic animals, particularly horses; and that to this cause the great increase of diseased horses is to be attributed. We lately heard a farmer affirm, that he believed the introduction of clover into general cultivation the greatest curse yet inflicted on the country, and assigned as a reason for this singular opinion its effects on animals when used as fodder. Late English writers have attributed to this kind of hay the prevalence of heaves in horses, and the great increase of other diseases that effect the respiratory organs. This is a most important subject, and should receive a full investigation. Clover is too important a plant to be discarded, or condemned, except upon the most satisfactory evidence. Its value as a fertilizer and a preparative for wheat, to say nothing of its use for pasture and hay, would demand that it should not be condemned unheard. For ourselves, we have very little belief in the injurious properties assigned to clover. We have used it constantly for pasture and for hay, more than thirty years, and never, to our knowledge, has any animal suffered from it; certainly, no horse has been taken with the heaves when fed on it, or while in our possession. As hay for sheep, we have considered it unrivalled, and should have no fears that any stock would not winter well with a supply of well-cured clover hay.

And here lies, we think, the great source of objection to clover hay. It is too often imperfectly cured. To save the leaves and the heads, which are apt to fall in handling or curing, the hay is put into the barn while the large stems are full of moisture, or the natural juices, and the fermentation which ensues causes the whole mass to become damp; and if not spoiled wholly, it becomes mouldy, black, and when used, raises such a dust, it is no wonder that horses and cattle are choked or their lungs destroyed. Our experience shows that clover may be perfectly cured without losing any of its valuable parts; cured so that when fed out, no more dust will be flying than from timothy or herds grass, and we shall be slow to believe that from such hay any injury to animals ever ensues. —*Ohio Valley Farmer.*

U. S. AGRICULTURAL SOCIETY.

The Executive Committee of this Society were in session at Louisville, last week, making the preliminary arrangements for the fifth exhibition, next fall. After full deliberation, it was decided to hold the exhibition on the 1st, 2d, 3d, 4th and 5th days of September next. This is a very judicious choice. Some of the reasons for the appointment of so early a day are, that all danger of the equinoctial storm is escaped, the stock is not fagged out by exhibition at other shows; the public curiosity has not been sated; the weather is not fitful; exhibitors can take prize stock and agricultural implements to other fairs; and moreover, this being the great National Show of the country, it very appropriately leads the way.

The fair is to be held on the grounds of the South Western Agricultural and Mechanical Associations, comprising forty-three acres—nearly as large as Boston Common. Of some of the features of the exhibition we have the following account:

"The ground is mainly level, and is supplied with abundant springs and cisterns of water, and is situated so as to be accessible on all sides. The Louisville and Lexington Railroad track runs immediately in front of the grounds. Passengers are landed on a platform which is fifty feet wide, running to a sufficient length for seventeen cars. The grand entrance is directly connected with this platform. Stock can thus be removed from the cars and driven across the platform into the appropriate entrance. Implements and machinery are directly taken to the place, and the usual delay and expense of cartage between distant points is entirely obviated.

One of the most novel features of this exhibition will be showing stock of horses to the several juries in a magnificent amphitheatre, around which are erected tiers of seats to accommodate 8000 persons. There is a tower in the centre of this, in which the judges are placed. When the hour appointed for the exhibition of a certain class of stock arrives, it is announced by the ringing of a bell. The animals of the class are led into the arena through large gates, and their several points are examined and decided upon by the judges. The victorious animal is at once adorned with ribbons of various colors, and thus the entire audience are made acquainted with the results of the examination of the jury."—*Journal.*

HOME-MADE GUANO.

By a communication in the *American* (Baltimore) *Farmer*, we learn that Mr. Thomas D. Rotch, a gentleman from Scotland, but who claims an American descent—his father being a New Bedford man, and his mother from Nantucket—has secured in this country a patent for the manufacture of a manure by the treatment of the blood and offals of animals with sulphuric acid or other acids, or with copperas or other salts. Statements are made of the effects of this manure in England, that represent it as far superior to the best guano. A company for its manufacture has been organized in Philadelphia, and it is proposed to establish three others,—one in Baltimore, one in New York, and another in Boston. The patent in England was secured by a Mr. Oldham, who sold it to a company for fifty thousand dollars, and a "royalty" of two English shillings per ton upon all the manure thus made. That is a pretty tall price, but we have no reason to doubt its correctness. Mr. Rotch fixes the price of his manure at $45 per ton of 2000 lbs.

We have long thought, and have often said, that something ought to be done to prevent the waste of fertilizing matter in our cities. We hope Mr. Rotch will meet with such success as to incite the skill and ingenuity of others to devise means by which the very life-blood of our farms may be returned to enrich our hungry soils, instead of breeding disease and death in our cities, by being suffered to polute the air and water by which they are surrounded.

Mr. Rotch asserts that the manufacture of any manure in which blood and sulphuric acid are used "renders the *sellers*, the *consumers* and the *manufacturers equally liable for damages.*"

We think that no patent ought to authorize so broad a claim as the above, which we give in Mr. R.'s own words and italics.

For the New England Farmer.

FERTILIZERS.

MR. EDITOR:—It is unfair to pronounce judgment upon partial trial. If a system advocated plausibly, proves through our misapplication unadvantageous, who is to be censured? If a manure is given to a soil for a crop that does not demand it, and can in no wise be taken up to increase the expected harvest, who is to be blamed? The manure, the soil, or the one who misapplies, and does not adopt the proper arrangement to realize all the strength of what is to be afforded?

It is the opinion of the writer, so far as his observation and experience has served him, that the present price demanded for any manures, especially concentrated, cannot be paid with profit by the farmer, only under peculiar circumstances. Acknowledging these premises, it is positively necessary for the farmer's patience, as well as for his time and money, to use those manures that he is acquainted with, or profit by studying the wants of his soil. And not till the farmer better understands the nature of the soil, and the influence of air, will he be able to support and defend an outlay beyond what his own land possesses. And when the farmer learns to manufacture and invest his soil with a fund that bids defiance to foreign influences, from his own precincts and laboratory, then he may purchase concentrated fertilizers at fair prices.

The admixture of different soils might very conveniently be made at no considerable expense, which would be of permanent value. Lime and plaster can be used to supply deficiencies, and restore soils to good condition, if we had the intelligence and enterprise to manage them. It is no great credit to a farmer to send to New Jersey for earthy constituents, when he has suitable lands for peat, and a plenty of it, because some prodigal farmer recommends marl. Money and time are to an unpardonable extent expended upon the farm, the revenue of which fills the coffers of the quack manure dealer; and the time spent yields us no gratification, but to know that we are duped. E. J. W.

For the New England Farmer.

ADVANTAGES OF UNDERDRAINING.

I recollect a remark once made by Prof. Mapes, in an address before our agricultural society, in regard to underdaining. He said, in effect, "that all land, no matter how dry, needed underdraining, even to the tops of our hills"—and he gave his reasons for the remark; but the remark then, notwithstanding his reasons, was received with many a smile of incredulity by the farmers then and there assembled, myself amongst the number. But I, for one, am disposed to look at the remark as less chimerical than when I first listened to it; and, in fact, I find myself frequently almost advocating the theory. I am intending to lay a few thousand of tile the coming season on a piece of land apparently not over burthened with water. Among the reasons that induce me to make the outlay for underdraining, the following extracts from an article originally published in the *Genesee Farmer*, and quoted into the *Working Farmer*, volume 5, No. 9, page 199, are included. The author says:—"It will remove all excess of water in the fall, winter and early spring, when it needs but little; and in the summer time, when plants need large quantities of water, and the undrained soil is very dry, it will make the soil quite moist, and supply the plants with sufficient water. Every farmer who has tried underdraining, knows whether he can understand the cause or not, that his drained land is much drier in a wet time, and more humid in a dry time, than his undrained land, and that it will stand a drought very much better; in fact, that droughts seldom affect his well drained land." Then, after giving the reasons that exist for this state of things, he goes on to say that, "When a soil, especially a retentive one, is underdained, the water, as it percolates through it, leaves innumerable small pores; it becomes like a sponge, a reticulated mass of fine tubes. These tubes, when the surface is wetter than the subsoil, carry down the water to the drains below; and when the surface is dryer than the subsoil, as it is in a drought, these tubes carry up the water to the roots of the plants." Un-

derdraining is not built on this theory, but the theory is founded on the practical results of underdraining, and will the more commend itself to practical farmers.

Plants can take their food only in a state of dilute solution. They cannot live and grow without a constant supply of fresh water. Stagnant water is exceedingly deleterious; no fact is better demonstrated than that plants cannot grow and thrive, however well manured, so long as their roots are surrounded with stagnant water. The necessity for underdraining rests on these three facts. Not only does underdraining remove all excess of water, and supply it when deficient, but it equalizes the temperature of the soil. In the spring and fall, when a warm soil is so much needed for the germination and maturation of seeds, the thermometer shows that an underdrained soil is several degrees warmer than one that is not drained; while in very hot weather, the case is exactly the reverse of this. It is a well known fact that vegetation starts much earlier in the spring, and continues later in the fall, on a drained than an undrained soil.

But besides the beneficial mechanical effect on the soil, underdraining has great chemical action. The removal of stagnant water, and the free admission of air in its stead, accelerates the disintegration of minerals, as well as the decomposition of organic matter in the soil, rendering them both available as food for plants. Again, the rain, as it falls, and filters through a well drained and loamy soil, carries to the plants one of the most needed and expensive of all the constituents of cereal crops. The reader need not be told that I mean ammonia. The rain that falls on an acre in a year, is estimated to contain over 100 lbs. of ammonia, or sufficient for the growth of 17 bushels of wheat. The experiments of Professors Way and Thompson have shown that when ammonia is filtered through a soil containing a good proportion of clay, the ammonia is retained in the soil, and the water passes through, free from it. Does this throw no light on the *cause* of the increased crops following thorough underdraining? The other causes we have mentioned are merely concomitants.

The *cost* of underdraining is the most potent argument against its adoption. Thirty dollars is considerable money to invest on an acre of land; but it must be remembered that it is a *permanent* investment. When well done, it will last a century or more. It is not like paying out $7 in guano per acre, which lasts but one year or two, at most. It is a perpetual means of obtaining increased crops. The 100 lbs. of ammonia contained in the rain which falls on an acre per annum, cannot be purchased in guano, its cheapest form, for less than $15. A greater part of this is lost on undrained soil, while on one that is well underdrained, the whole of it is, or may be, retained. The expense of cultivation is less on the drained than on the undrained land. You can plow it earlier in the spring, and later in the fall; and after heavy rains, when the land not drained is so wet that man or beast cannot go on it, the drained soil will be in fine condition to work. The whole of the increase in crops obtained from draining must be considered clear profit. I believe *one-third* increase to be a low estimate; and as this one-third of the entire produce of the farm is clear profit, it will pay a high interest on the $30 invested in underdraining. Any farm, which, from its location, is worth $40 to $100 per acre, if it needs draining, cannot fail to pay a handsome interest for money judiciously laid out in underdraining. Professor Mapes's farm is underdrained entirely with good success. John Johnson, of Geneva, N. Y., has laid about 40 miles of tiles on his farm, and one of his neighbors, whose name I cannot now recall, has 46 miles of tiles laid on his farm. Mr. J. has been engaged some 17 years in draining his farm, and is perfectly satisfied with the result, having grown some 27 bushels of wheat to the acre, when his neighbors only succeeded in getting some 8 to 10 bushels on land otherwise as good, and lying contiguous. Perhaps the peculiar quality of the soil is such, that such farmers as Mr. Johnson would derive greater advantage from underdraining than would others differently located, and with a soil not containing as much clay as is necessary to render it retentive of ammonia; but this defect in most localities, (if existing,) can be very readily obviated by carting on clay. One hundred loads to the acre is sufficient for the amendment of a soil that is nearly or quite destitute of clay. FRANKLIN CO., MASS.

For the New England Farmer.

BOYS' WAGES.

MR. EDITOR:—My heading is one which is not often seen in the papers, and indeed, I don't know that I have *ever* seen anything on the subject. And it is not only neglected in the *papers*, but in reality. It is, as far as I can judge, little written, and little thought about.

Boys do not generally (as far as I know,) get paid in proportion to their work; they are not always bold enough to assert their rights, and are often—if I may judge from cases that have come under my observation—put off with little or no wages, with false arguments, flattering words, being told that they have been pretty good boys, and would like to have them come again some time, and the like.

Another way is, when they hire out, they agree to work for what the man for whom they work thinks "about right," and so, when he is paid, poor juvenus gets about half of what he supposed to be "about right." Many a boy works for 75 cents who can do as much as the $1,50 man; and for 20 to 30 cents, when he can do nearly as much as a great many men. For instance, when I got a Yankee shilling per day, I could do half as much at many things, and as much at some things, as the men. And in numerous other ways are the boys neglected, and what is worse, *cheated*.

Ought not good working boys of 14 or 15 to receive 37 to 45 cents a day? Or what ought to be the price? I should like to have the opinion of yourself or correspondents on this subject.

Yours truly, UNUS PUERORUM.

THE FAMOUS HORSE "NORTH STAR."—HENRY OLMSTED, ESQ., of East Hartford, Vt., has taken this fine horse, with several Morgan mares, and gone to Harrison county, Iowa, to a new settlement which is to be called Olmsted. He was offered three thousand dollars for the North Star at East Hartford, but declined the offer, preferring to retain him

and improve the breed of horses in that section of the West. He takes along with him about twenty good farmers, and several mechanics. This is the true mode of settling and reclaiming the West.

LEGISLATIVE AGRICULTURAL MEETING.

[Reported for the Farmer by H. E. Rockwell.]

The *Twelfth* regular meeting of the Legislative Agricultural Society was held on Tuesday evening. The number of gentlemen present was not so great as usual, and those who appeared were rather tardy, indicating that the period for agricultural meetings has nearly passed for the present season.

The President, in calling the meeting to order, expressed his regret at the thinness of the attendance, and introduced R. S. Fay, Esq., of Lynn, as the chairman of the evening. In commencing his remarks, Mr. Fay announced the subject for discussion, which, in his opinion, was too comprehensive, embracing too many topics for consideration in one evening. The subject as announced was "*Farm Economy, in relation to Farm Buildings;—Farm Tools, and housing them.*"

He proposed to confine his remarks to two of the points suggested by the general question; first —the most economical material for the construction of farm buildings; second, the best arrangement or the best form for farm buildings in Massachusetts. As there were but three principal materials for building, namely, brick, stone and wood, he would like to have gentlemen speak with reference to the comparative value and economy of buildings of wood, as compared with either of the other materials. Then, having settled the question as to the best material, there was an important inquiry to be made, as to the form of arrangement with reference to the economy of building and convenience for use as farm buildings. All agree that warmth and shelter for cattle, in winter, are essential not only to the comfort of animals, but to true economy. So also, in summer, it is a great saving to have animals kept cool and quiet; and he believed they would thrive better to be housed a part of every day through the year. If the comfort of animals were the only consideration, perhaps, all would agree that stone or brick would be the best material. But for purposes of a granary for storing hay and other fodder, it may be an important question whether the dampness that gathers upon stone walls, by communicating with the hay or grain, may not more than counterbalance the advantage to the cattle.

The question then arises, may not a part of the barn be constructed of stone, so as to give the cattle the advantage of warmth in winter, and a cool shelter in summer, and the upper part of wood for the purpose of storage of crops. Foreign writers, from whom we derive much of our information on agricultural and farm buildings, speak of the great importance of having plenty of barn room, sheds, and a variety of out-buildings. But their climate, it must be remembered, is quite different from ours. Our climate is, perhaps, as trying as any for the for the management of cattle or for storing produce from the farm. In winter cattle must be housed constantly; whereas, in other countries the cattle are out in the open air all the time. There the wheat, rye, and oats are stacked. Instead of being put under cover, their root crops are fed on the ground where they grow. All they want is sheds, under which cattle can go in the daytime.

They therefore need more space; but we want more economy of room; we want a building which will enable us, if possible, to have all the departments of the out-buildings under one roof. So that we reverse the practice of England Ireland and Scotland in that respect. He was sorry to see some farmers copying foreign models in that respect, and extending their farm buildings over a large space. The Germans build the basement to their barns of stone, and have a cellar beneath that for roots, and above they store their hay and grain, and thus they secure all the desirable purposes of farm buildings under one roof. To secure such a building it is only necessary to place the barn upon a hill side, so that it may be entered upon the different floors. The difference in expense in keeping one such building in repair, compared with that of many spread about over a great space, will be very great; and though the first cost may be more, it is true economy to build in that way. Experience is the best guide, he said, and therefore, he desired gentlemen to state what theirs had been on the branch of the general subject to which he had opened the way.

Mr. Hammond, of Grafton, was called up to speak on the question as presented. He said he had studied considerably on the best method of building barns and granaries; but perhaps others would not agree with him, because it is difficult to make farmers introduce new things. He would have his animals in a building separate from the hay and other fodder. The breath, and the gas from the manure, should not be allowed to be communicated to the hay or crops which are to be fed out. Another thing much wanted in barns is better ventilation. In most barns there is no opening above, nor any chance for proper ventilation. Windows are placed in stalls for light; but for ventilation the windows should be near the floor, and there should be pipes from the roof to carry off the upper air. Many barns are air tight, and the breath of animals and the moisture from the stalls will produce frost in the upper part of the building. To obviate this dificulty, the cattle should be kept separate. The gases that arise from the manure and the breath of cattle will turn the hay brown, and it will not be

sweet. Stone is preferable for a basement. But where hay comes against stone it will become musty. To prevent this, a board partition is requisite, with a space for air to circulate between. The best form for a barn is that of nearly a square. A barn fifty by sixty feet will permit the packing of hay so as to hold as much as a barn forty by one hundred. It costs about one-third more to build a stone wall with mortar than to build with wood.

Mr. WETHERELL thought that wood was the best material. Farmers do not agree as to the closeness of covering. Some put on the boards double, while others prefer to have a chance for the air to pass in. It is probable that hay will heat more in a close barn than in one more open. He thought hay could be kept about as well in the stack as in barns; but it was more convenient to feed from a barn. Considerable has been said about two barns in different sections of the State—one in the west, and one in the east. One in the western part cost, he believed, $40,000. But he thought a model barn, that costs from $600 to $1000, would be worth much more to the farms of Massachusetts. He spoke of the importance of housing tools, and then went on to refer to what he thought practicable, and which he expected to see accomplished; namely, the cutting of hay by a machine, having it pitched on to the cart by machinery, and then when in the barn, raised up by machinery and placed on the mow.

Mr. BARBER, of Gloucester, said that so far as he was acquainted, there were few farmers who could afford to put up a barn worth even six hundred dollars. As to housing tools, it was very necessary in Massachusetts to do it, especially here, near the shore; because any iron tool left out exposed over night, will be covered with rust in the morning.

Mr. WARD, of Orange, thought the question of building of wood or stone would depend on the convenience of procuring the materials. If houses are built of brick, with two distinct walls, the inner wall will be dry. But in most places there is too much expense in transporting stone to make buildings of that material economical. He would build a barn as tight as possible. He had had a barn as loose as any man, and the hay was injured by exposure to air and moisture. Now he had built a barn as tight as he could, with double boards. His cattle and hay both are much better kept. He agreed that the vapor over stalls would injure hay; and to obviate that, he fed the hay from the scaffold over the stalls first. He preferred to have doors so that he could drive through the barn. He would have the doors on rollers, so as to slide to the right or left. He found such doors a great convenience. To obviate the injury to tools from the sun, paint was very important, a coat of which should always be kept on them when possible.

Mr. HAMMOND again spoke of building with *concrete*. He built a house last year, in the early part of the season, of poor cobble stones, and it became very compact and did not crack at all; and is now very firm. When built in spring, so as to give sufficient time to harden, he thought it an excellent and cheap material.

The CHAIRMAN said that the idea had been suggested that boards on a barn would last much longer when put on up and down rather than horizontally, and he wished gentlemen would state their experience on that point, if they had any, and also give the reason, if it were so.

Mr. BANVARD, of Buckland, was called up, and spoke of his expense of money and time previous to building a barn for the purpose of getting a good model; in his search he found better barns in Vermont and New York than any he saw in Massachusetts. He would have no stables on a floor even with the mows. They should be below. His barn was forty-two by sixty. The second floor is an open space on each side of the drive-way, sixty feet long. He had a double floor over the manure cellar, one being the barn floor, made with two thicknesses, another ten inches below. He had no ventilation in the top of his barn, and did not want one. He thought a barn for hay could not be kept too close. He would keep the doors as close as he would the doors of the granary when the hens were around. If the barn is open he thought the heat of the mow was forced to the centre; but if close, the heat was distributed. Simply oiling tools he thought better to preserve them than a coat of paint.

Mr. WETHERELL suggested the reason why boards would last longer when placed upright than the other way, was because the water courses over the board with the grain of the wood instead of across it. He had no doubt of the fact, and had heard the same stated by men of experience.

Mr. W. J. BUCKMINSTER thought we ought to discountenance the laying out of great and extravagant sums for barns, or for the sake of having very handsome ones. The tendency is bad, as it affects the interests of young farmers, who have too little capital to employ it in such a way.

The subject for the discussion of the next meeting will be, "*Insects as injurious or beneficial to vegetation.*"

CHINESE SUGAR CANE.—At a late meeting of the Boston Historical Society, says the *Traveller*, Dr. Jackson, in reply to a question, stated that the Chinese sugar cane raised in the vicinity of Boston, would not yield crystalline sugar in quantities to warrant its cultivation. A small quantity could be obtained from the plant, but a syrup which was suitable for food or distillation was readily obtained. The farther south the cane is raised, the more sugar it yields.

For the New England Farmer.

FEMALE HELP.

Foreign help is now almost universally employed, in our families in New England, not only in the towns and cities, but in the country. This help constitutes a class by itself—a distinct caste. They associate together, and compose a separate society. They are ignorant, and are looked upon as an inferior class. I will refer to only one of the effects of the existence of such a distinct class in the country, viz., its tendency to degrade labor; like the presence of slaves, in slaveholding communities. When the laborer, from whatever cause, is in a degraded condition, labor itself comes to be considered a degradation. While Cincinnatus held the plow, the cultivation of the soil was an honorable employment. But when the prisoners who were taken captive by his courage and prowess, were compelled to hold the plow, the cultivation of the earth soon became too degrading an employment for the Roman soldier or citizen. Household labor is by no means as reputable as it was, when it was done by the members of our own families. The younger members of the family, especially, are growing up with the idea that the washing and scouring and cooking, the harder and more unpleasant part of the labor, which is done by Irish help, is unsuitable for them, is a degradation; and they learn to despise it. Household labor is conducive to health and vigor. The health of our females has deteriorated since spinning and weaving have been given up, and the labors of the kitchen and dairy have been transferred to foreign females. The pernicious effects of this change are manifest in our families and in our children. The remedy must be found, either in a return to household labors, or in a vigorous course of exercise in the open air, such as is adopted by English females.

There is a mistaken idea connected with our system of education, which is, that education—cultivation of the mind and manners—is designed to raise us above the necessity of bodily labor. Our daughters seek education, that they may be fitted to teach, or engage in intellectual pursuits, and lighter avocations. The true idea of education, that which should be kept before the mind of the young while pursuing study, is that education will fit them to labor better, more easily, more profitably, more happily. Were this idea made prominent to the young, education would not, as is now too often the case, unfit those for labor, who are so fortunate, —or shall I rather say unfortunate—as to have the means of obtaining it. They would not, then, at the same time with their education, acquire the foolish notion that labor is a degradation, but would be taught that the object of educatien is to qualify them to apply, understandingly and successfully, their faculties of mind and their physical powers to any kind of labor that they may be called upon to engage in by their circumstances or situation.

Now our young men and women think and say that their education will all be lost, if they engage in bodily labor. An Irish man or woman can do this as well as they can. Why should they get an education, if they must labor? But is this true? Can an ignorant Irish man or woman labor as well as an intelligent, educated man or woman? Can they labor as skilfully, as successfully, and with as good results? One great advantage of intelligence is, that it saves labor. The intelligent laborer will accomplish his labor in less time, and with less outlay of muscular strength. He will make his brain do the work of his hands. He will labor for the future, as well as for the present. The labor of to-day, will not only serve the purpose of to-day, but to a certain extent, will be a preparation for the work of to-morrow. He will use his time, and strength, and capital, to the best advantage, and where they will be most productive of profit or gratification, and thus he will save time for the further cultivation of his mind, and for the exercise of his public spirit or his benevolence. This is no less true in the house than in those labors that are more appropriate to the stronger sex. And why should it not be so?

The intelligent and educated woman applies, not only her hands, but her mind, to her work. She works to better advantage. She does not make mistakes and failures. She does not waste her time and strength in labors which accomplish nothing. She works with a will, and with the expectation of finding time for mental improvement, and social enjoyment. While her hands are employed, she arranges her plans for the future, so that one duty, or one occupation shall not conflict with another. She has a time for everything, and everything in its time; and thus she accomplishes much more in a given time, than one who works without plan or forethought. She understands the nature and properties of the materials she uses, and her cultivated taste leads her to work out all her results in accordance with the laws of fitness and propriety. Hence, in these results, are not only the demands of necessity met, but the love of order and beauty is gratified, and with a much less expenditure of time and strength. She accomplishes much more necessary work, and at the same time, surrounds herself with an atmosphere of neatness and comfort, and even elegance, which is wholly unknown to the ignorant and uncultivated. Her home is rendered a place of enjoyment and happiness. She surrounds herself with objects of attraction and beauty, suitable to her circumstances. She is herself the central object of attraction and moral beauty.

But how shall this state of things be brought about? How shall the mistake in education be corrected? Says Olmsted, in his Travels in the Slave States, "A man in New Orleans told me that he now had one slave, and he got along very well; but if he married he would have to purchase three more, and he could not afford it." A young man in Massachusetts married an Irish girl. When a lady acquaintance remonstrated with him, asking him how he could do so, he replied, "If I married an American girl, I should have to get an Irish girl to take care of her, and I cannot afford to maintain two." Hundreds of young men are deterred from marrying for the same reason; and hundreds who have married have bitterly regretted their imprudence. How many wives live in a state of unhappiness, because they consider it a degradation to do their own labor; and how many families are kept poor and unhappy by indulging their foolish pride, and employing ignorant foreign help to do their work, which they might do, not only with much greater economy, but with much greater comfort and satisfaction, themselves; and which they would do, did not the mistaken notions which they imbibed in early life stand in the way. Says the Prophet, "as is the mother, so is the daughter."

In relation to this subject the influence of maternal teaching and example is specially important. So long as a servile class exists in our midst, labor will be considered a degradation, whether that class consists of an ignorant European race, or of an ignorant African race. So long as this is the case, the influence and example of mothers and female teachers will be needed to counteract its effects upon our daughters. R.

For the New England Farmer.

MERINO SHEEP.

MR. EDITOR:—Can you or any of your numerous correspondents give any definite information relative to what was termed the "Essex Merino Association," established at Windsor, Vt., some forty years ago? I noticed, not many years since, some where, the names, or a few of them, belonging to this company. I will name them:—John Punchard, Esq., of Salem, Mass., John Ashton, Esq., Abel Lawrence, James King, Leverett Saltonstall, Esq., all of Salem in the County of Essex—John Morland, of Roxbury, and I think others whose names I do not now recollect. I understand this Association was formed for the purpose of growing fine wool and fine sheep. My object, in this inquiry, is to ascertain where these sheep were obtained, and, if imported, by whom; I understand this association laid out and expended at Windsor from $100,000 to $200,000; if so, and these gentlemen made this great outlay for the benefit of their county, their object, no doubt, was a good one, and whether successful or not, should not go down to posterity unremembered.

GEORGE CHADWICK.

Wilton, Me., March 20, 1857.

REMARKS.—Perhaps the Hon. JOHN W. PROCTOR, of South Danvers, can shed the desired light on this subject.

APTITUDES IN MEN.—It is very certain that no man is fit for everything; but it is almost as certain, too, that there is scarcely any one man who is not fit for something, which something nature plainly points out to him by giving him a tendency and propensity to it. Every man finds in himself, either from nature or education (for they are hard to distinguish,) a peculiar bent and disposition to some peculiar character; and his struggling against it is the fruitless and endless labor of Sisyphus. Let him follow and cultivate that vocation, he will succeed in it, and be considerable in one way at least; whereas if he departs from it he will, at best, be inconsiderable, probably ridiculous. — *Lord Chesterfield.*

DR. EDDY'S PATENT SELF-FEEDING STALL FOR HORSES.—The above named patent was issued on the 6th ult. to H. Eddy, of North Bridgewater, Mass. The inventor proposes to accomplish, and, so far as we can see, does accomplish, the following objects: 1st, a horse can be fed without soiling his head or foretop by hay seed or other matter; 2d, he cannot breathe upon his hay or soil it by constant mouthing, and thus render it unpalatable. He can receive it *no faster than he takes it and eats it.* The stall is abundantly ventilated, and the horse cannot waste a particle of his food.—*Caledonian.*

GUNPOWDER AND TURPENTINE.—If spirits of turpentine be poured on gunpowder, the latter will not explode. An incendiary was once defeated in his purpose by this very means. Wishing to secure an explosion of gunpowder, he covered it with a quantity of spirits of turpentine, but on igniting it only the turpentine burnt, while the powder remained as before. The gunpowder acts as a wick to the turpentine, and will not itself ignite so long as any of the turpentine remains to burn.

LADIES' DEPARTMENT.

A SUPERIOR WASHING FLUID.

MESSRS. EDITORS:—I send you a receipt for making a superior Washing Fluid, which I have had in use over two years. There is no precipitate if prevented from freezing and properly made. In the following proportions it will not cost over three cents a quart:—

Dissolve 1 pound of sal soda in 1 quart of hot water, and add to it 4 quarts of lime water; when this settles pour off the clear. Next dissolve 3 ounces of borax in 1 quart of boiling water, and add it to the 5 quarts of clear water. When cold dissolve in it 2 or 3 ounces of pulverized carbonate ammonia. Put it in bottles, and keep it tightly corked.

This fluid makes strong, thick "suds," makes washing less injurious to the hands, and it cleans the clothes with less rubbing. Use ½ pint, or less, to about 5 gallons of water; put it, with some soap, into the tub of clothes the night before washing-day, or a short time before boiling the clothes. I think this chemical fluid, among the list of washing compounds, will take "the rag off the bush"—and clean it. TRENTON.

Trenton, N. J., March, 1857.

Washing fluid made after the above receipt, we have no doubt will be found an excellent article, and we are much obliged to our correspondent for it. Many who are in the habit of using washing fluid do not appear to be aware of their nature and specific objects. Why should they be used at all in washing? We answer simply to provide a slight excess of alkali to combine with the grease and dirt on the clothes. They should be sparingly used, at best, and wholly discarded in washing laces and fine linens.

Good soap suds of sufficient strength makes the best of washing fluid for fine white textile fabrics. The chloride of soda makes an excellent fluid for whitening linen that has become yellow in color, and as a washing fluid is inferior to none.

The use of strong caustic alkalies impart a yellowish tinge to the fine linens, and tends to injure them, and therefore should be used (if at all) with much caution.—*Scientific American.*

TO CLEAN WALL PAPER.—Soiled wall papers may be made to look as well almost as new, in most cases, by the following expedient:—Take about two quarts of wheat bran, tie it up in a bundle in coarse flannel, and rub it over the paper. It will cleanse the whole paper of all description of dirt and spots, better than any other means that can be used. Some use bread, but dry bran is better.